

Reversible Self-Dual Codes Over GF(4)

```
F<w>:=GF(4);
```

```
C4:=LinearCode<F, 4|
```

```
[ 1, 0, w, w^2],
```

```
[ 0, 1, w^2, w]>;
```

```
//CWE(a,a,b,b) :  $2*a^4 + 12*a^2*b^2 + 2*b^4$ 
```

```
C6:=LinearCode<F, 6|
```

```
[ 1, 0, 0, w, 1, w],
```

```
[ 0, 1, 0, w^2, w^2, 1],
```

```
[ 0, 0, 1, 0, w^2, w]>;
```

```
//CWE(a,a,b,b) :  $2*a^6 + 30*a^4*b^2 + 30*a^2*b^4 + 2*b^6$ 
```

```
C8:=LinearCode<F, 8|
```

```
[ 1, 0, 0, 0, 1, 0, 1, 1],
```

```
[ 0, 1, 0, 0, 1, 1, 0, 1],
```

```
[ 0, 0, 1, 0, 1, 1, 1, 0],
```

```
[ 0, 0, 0, 1, 0, 1, 1, 1]>;
```

```
//CWE(a,a,b,b) :  $16*a^8 + 224*a^4*b^4 + 16*b^8$ 
```

```
C10:=LinearCode<F, 10|
```

```
[ 1, 0, 0, 0, 0, w^2, 0, w^2, 0, 1],
```

```
[ 0, 1, 0, 0, 0, w, 0, w, 1, 0],
```

```
[ 0, 0, 1, 0, 0, 1, 1, 0, w, w^2],
```

```
[ 0, 0, 0, 1, 0, 1, 1, 1, 0, 0],
```

```
[ 0, 0, 0, 0, 1, 0, 1, 1, w, w^2 ]>:  
//CWE(a,a,b,b) : 8*a^10 + 72*a^8*b^2 + 432*a^6*b^4 + 432*a^4*b^6 + 72*a^2*b^8 + 8*b^10
```

```
C12:=LinearCode<F, 12|  
[ 1, 0, 0, 0, 0, 0, 1, 1, w^2, w, 1, 1],  
[ 0, 1, 0, 0, 0, 0, w, w^2, 1, 1, 1, 1],  
[ 0, 0, 1, 0, 0, 0, w^2, w, w^2, 0, 1, w],  
[ 0, 0, 0, 1, 0, 0, w, 0, w, w^2, 1, w^2],  
[ 0, 0, 0, 0, 1, 0, w^2, w, 0, w, w^2, 1],  
[ 0, 0, 0, 0, 0, 1, 0, w^2, w, w^2, w, 1 ]>:  
//CWE(a,a,b,b) : 2*a^12 + 132*a^10*b^2 + 990*a^8*b^4 + 1848*a^6*b^6 + 990*a^4*b^8 + 132*a^2*b^10 + 2*b^12
```

```
C14:=LinearCode<F, 14|  
[ 1, 0, 0, 0, 0, 0, 0, w, 1, w^2, 1, w^2, 1, w],  
[ 0, 1, 0, 0, 0, 0, 0, w, 1, 0, 1, w, 0, 1],  
[ 0, 0, 1, 0, 0, 0, 0, w, 0, w^2, w^2, w, w, w^2],  
[ 0, 0, 0, 1, 0, 0, 0, w, w, w, w^2, 1, 1],  
[ 0, 0, 0, 0, 1, 0, 0, w, w^2, w, w, w^2, 0, w^2],  
[ 0, 0, 0, 0, 0, 1, 0, 1, 1, w^2, w, 0, 1, 1],  
[ 0, 0, 0, 0, 0, 0, 1, 0, 1, w, 0, w, w, w ]>:  
//CWE(a,a,b,b) : 2*a^14 + 182*a^12*b^2 + 2002*a^10*b^4 + 6006*a^8*b^6 + 6006*a^6*b^8 + 2002*a^4*b^10 + 182*a^2*b^12 + 2*b^14
```

```
C16:=LinearCode<F, 16|  
[ 1, 0, 0, 0, 0, 0, 0, 0, w^2, 1, 1, w, 1, 0, 1, 0],  
[ 0, 1, 0, 0, 0, 0, 0, 0, w, 1, 1, w^2, 0, 1, 0, 1],  
[ 0, 0, 1, 0, 0, 0, 0, 0, 1, w^2, w, 1, 1, 0, 1, 0],  
[ 0, 0, 0, 1, 0, 0, 0, 0, 1, w, w^2, 1, 0, 1, 0, 1],  
[ 0, 0, 0, 0, 1, 0, 0, 0, 1, 1, 0, 0, 1, 1, w^2, w],
```

```

[ 0, 0, 0, 0, 0, 1, 0, 0, 1, 1, 0, 0, w^2, w, 1, 1],
[ 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, 1, w, w^2, 1, 1],
[ 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 1, 1, 1, 1, w, w^2]>;
//CWE(a,a,b,b) : 16*a^16 + 128*a^14*b^2 + 4032*a^12*b^4 + 15232*a^10*b^6 + 26720*a^8*b^8 + 15232*a^6*b^10 + 4032*a^4*b^12 + 128*a^2*b^14
+ 16*b^16

```

```

C18:=LinearCode<F, 18|

```

```

[ 1, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w, w, w, 0, w, w^2, 0, 1],
[ 0, 1, 0, 0, 0, 0, 0, 0, 0, w^2, 0, 0, w, w, w, w^2, w^2, 0],
[ 0, 0, 1, 0, 0, 0, 0, 0, 0, w^2, 0, 1, 1, w, 1, 1, w^2, w^2],
[ 0, 0, 0, 1, 0, 0, 0, 0, 0, 1, w^2, 1, 1, 0, w, 1, w, w],
[ 0, 0, 0, 0, 1, 0, 0, 0, 0, 1, w^2, 1, w^2, 1, 0, w, w, 0],
[ 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, w^2, w, w^2, w^2, 1, 1, w, w],
[ 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, 1, w, 1, 1, 1, 0, w],
[ 0, 0, 0, 0, 0, 0, 0, 1, 0, w, w^2, 1, w^2, w^2, w^2, 0, 0, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w, 0, 0, 1, 1, w^2, w^2, w^2]>;
//CWE(a,a,b,b) : 16*a^18 + 208*a^16*b^2 + 6400*a^14*b^4 + 36736*a^12*b^6 + 87712*a^10*b^8 + 87712*a^8*b^10 + 36736*a^6*b^12 +
6400*a^4*b^14 + 208*a^2*b^16 + 16*b^18

```

```

C20:=LinearCode<F, 20|

```

```

[ 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, w, 0, w^2, 1, w^2, 1, w^2, w, 0],
[ 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 1, 1, w^2, w, w^2, 0, w, w],
[ 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, w, w, w^2, 1, 1, w, w^2, 0, 0, w^2],
[ 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, w^2, 1, 0, 0, 0, 1, w^2, w^2, w^2, 1],
[ 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, w^2, 0, w^2, 1, 0, w, 1, w, w, w^2],
[ 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 1, w^2, 0, w^2, w^2, 0, 0, 1, w^2, 1],
[ 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, w^2, 0, w^2, 0, w^2, 1, 0, 1, 1, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 1, 1, w^2, w^2, 0, w^2, 0, w^2, 1, 0],

```

```

[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w, w^2, 1, 0, w^2, 0, 1, w, w^2, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w, 1, w^2, 1, w^2, w^2, w, 0, w]>;
//CWE(a,a,b,b) : 2*a^20 + 380*a^18*b^2 + 9690*a^16*b^4 + 77520*a^14*b^6 + 251940*a^12*b^8 + 369512*a^10*b^10 + 251940*a^8*b^12 +
77520*a^6*b^14 + 9690*a^4*b^16 + 380*a^2*b^18 + 2*b^20

```

```

C22:=LinearCode<F, 22|
[1,0,0,0,0,0,0,0,0,0,0,w^2, 1,w^2, w^2, w^2, 1,w,1,w^2, 1],
[0,1,0,0,0,0,0,0,0,0,0,w^2, 1,w,0,1,w^2, 0,w^2, w^2, w^2],
[0,0,1,0,0,0,0,0,0,0,0,w,w,1,0,1,0,0,1,w,w^2, 1],
[0,0,0,1,0,0,0,0,0,0,w^2, 1,1,w,w,0,1,0,1,0,w],
[0,0,0,0,1,0,0,0,0,0,w,w^2, w,0,w,w,1,1,0,w^2, 1],
[0,0,0,0,0,1,0,0,0,0,w^2, w^2, w,w,w,w^2, w,0,0,1,w^2],
[0,0,0,0,0,0,1,0,0,0,1,w^2, 1,w^2, 1,w,w,w,1,0,w^2],
[0,0,0,0,0,0,0,1,0,0,0,w^2, w,1,w^2, w^2, w,0,w,0,w,w^2],
[0,0,0,0,0,0,0,0,1,0,0,0,w,w^2, 1,1,w,w,1,1,1,1],
[0,0,0,0,0,0,0,0,0,1,0,w^2, w,w,w,w^2, w^2, w^2, 1,w,w^2, w^2],
[0,0,0,0,0,0,0,0,0,1,0,w^2, 0,w^2, 1,w^2, w,w^2, w,0,0]>;
//CWE(a,a,b,b) : 8*a^22 + 504*a^20*b^2 + 14168*a^18*b^4 + 150696*a^16*b^6 + 637392*a^14*b^8 + 1294384*a^12*b^10 + 1294384*a^10*b^12 +
637392*a^8*b^14 + 150696*a^6*b^16 + 14168*a^4*b^18 + 504*a^2*b^20 + 8*b^22

```

```

C24:=LinearCode<F, 24|
[ 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w^2, 0, w^2, 1, 1, w, w, 1, w, w^2, w],
[ 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w^2, 1, w, 1, 1, w, w, 0, w^2, w, w^2],
[ 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w, 1, w, 1, 0, w^2, w, 1, w^2, w^2, w],
[ 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w, 1, w^2, 1, 0, 1, 0, w, 1, 0, 1],
[ 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w, 1, w^2, 1, 1, w^2, w^2, 0, w, w, w],
[ 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, w, w^2, 0, w, 1, 1, w^2, w^2, 1, w^2, w, w],
[ 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 1, 1, 0, 0, 1, 0, 1, 1, 0, 0, 1, 1],

```

```

[ 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 1, 1, 1, 1, 0, 1, 1, 1, 1, 1, 1, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, 0, 0, 0, 1, 0, w, w^2, w^2, w, w, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 1, 0, 1, 0, 1, 0, 0, 1, 1, 1, 1, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 1, 1, w^2, w, w, w, w^2, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 1, 1, 1, 1, w, w^2, w^2, w^2, w^2, w^2]>;
//CWE(a,a,b,b) : 1024*a^24 + 18432*a^20*b^4 + 196608*a^18*b^6 + 1883136*a^16*b^8 + 2949120*a^14*b^10 + 6680576*a^12*b^12 +
2949120*a^10*b^14 + 1883136*a^8*b^16 + 196608*a^6*b^18 + 18432*a^4*b^20 + 1024*b^24

```

C26:=LinearCode<F, 26|

```

[ 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w, 0, w, 0, w, 0, 0, 1, w^2, 1, w^2, 0],
[ 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, 1, 1, 1, w, w^2, w, 0, 0, 0, w^2, 1, w^2],
[ 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w^2, w, w, 1, 1, 1, w^2, 1, 1, w^2, w^2, 1],
[ 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w^2, w^2, 0, 1, w^2, w, 0, w, 0, 1, 0, w^2],
[ 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 1, w^2, w^2, 1, w^2, w^2, 0, w, 1, w, 1, 0, 1],
[ 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 1, 0, 1, w^2, 0, w, w, w^2, w, 0, w^2, 0, 0],
[ 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 1, 1, w, 0, w^2, 0, w^2, w, 0, w, 1, w, 0],
[ 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, w^2, 0, 0, w, w, 0, w, w^2, w^2, 1, w^2, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, w^2, w^2, 1, 0, w, w^2, 0, w^2, 1, 1, w, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, w^2, w^2, w^2, 1, 0, 0, w^2, 1, 0, w, 1, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, w^2, w, w^2, w^2, 0, w, 1, w^2, w^2, w, 1, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 1, 1, w^2, w^2, w^2, w^2, 1, 0, w^2, w^2, w^2, 1, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 1, 0, 0, 0, 0, 1, 1, 1, 1, 1, w, w^2]>;
//CWE(a,a,b,b) : 128*a^26 + 896*a^24*b^2 + 28160*a^22*b^4 + 455168*a^20*b^6 + 3159680*a^18*b^8 + 10560896*a^16*b^10 + 19349504*a^14*b^12
+ 19349504*a^12*b^14 + 10560896*a^10*b^16 + 3159680*a^8*b^18 + 455168*a^6*b^20 + 28160*a^4*b^22 + 896*a^2*b^24 + 128*b^26

```

C28:=LinearCode<F, 28|

```

[1,0,0,0,0,0,0,0,0,0,0,0,0,0,1,0,w^2,w,0,w^2,1,w,1,w^2,0,w^2,w^2,w^2],
[0,1,0,0,0,0,0,0,0,0,0,0,0,0,w^2,1,w,1,w^2,0,w,1,w^2,w^2,w,1,0,w^2],

```

```

[0,0,1,0,0,0,0,0,0,0,0,0,0,0,0,w,w,0,w^2,w^2,1,1,w,1,w^2,w^2,0,1,w^2],
[0,0,0,1,0,0,0,0,0,0,0,0,0,0,0,w^2,w^2,1,0,w^2,w^2,w^2,0,1,w^2,w^2,w,0],
[0,0,0,0,1,0,0,0,0,0,0,0,0,0,0,w,w,0,1,0,w,w^2,1,w,0,1,w^2,w^2,w^2],
[0,0,0,0,0,1,0,0,0,0,0,0,0,0,0,1,0,1,1,1,0,w,1,w^2,w,0,1,w^2,1],
[0,0,0,0,0,0,1,0,0,0,0,0,0,0,0,w,w^2,1,1,w,1,1,0,1,1,w^2,w,1,w],
[0,0,0,0,0,0,0,1,0,0,0,0,0,0,0,w,w^2,w^2,1,w,0,1,1,w,w^2,w^2,1,w,1],
[0,0,0,0,0,0,0,0,1,0,0,0,0,0,0,1,1,w^2,0,w,w,0,1,0,w,w^2,1,0,w^2],
[0,0,0,0,0,0,0,0,0,1,0,0,0,0,0,1,w,0,1,w,w,w,1,0,0,w^2,w^2,0],
[0,0,0,0,0,0,0,0,0,0,1,0,0,0,w,0,0,w,0,0,1,1,1,1,1,w^2,1,w],
[0,0,0,0,0,0,0,0,0,0,0,1,0,0,w,w,1,0,w,w^2,w^2,1,1,0,w^2,0,w,w^2],
[0,0,0,0,0,0,0,0,0,0,0,0,0,1,0,w^2,w,w,0,1,1,w^2,w^2,0,w,w^2,w,1,0],
[0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,0,w^2,w,w,0,1,w,w,1,w,0,w,w^2,1]>;
//CWE(a,a,b,b) : 16*a^28 + 672*a^26*b^2 + 40880*a^24*b^4 + 755776*a^22*b^6 + 6205584*a^20*b^8 + 26273632*a^18*b^10 + 60796848*a^16*b^12 +
80288640*a^14*b^14 + 60796848*a^12*b^16 + 26273632*a^10*b^18 + 6205584*a^8*b^20 + 755776*a^6*b^22 + 40880*a^4*b^24 + 672*a^2*b^26 +
16*b^28

```

C30:=LinearCode<F, 30|

```

[ 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w^2, w^2, w^2, w, w^2, w, w^2, 1, w, w, 0, 1, w, w^2],
[ 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 1, 0, w^2, 1, w, w, w^2, w, w^2, w, 0, w^2, w],
[ 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w^2, w^2, w^2, 0, w^2, w, w, w, 0, 1, w, 0, 1],
[ 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, w^2, 0, w, 1, 1, w, 0, w, 1, 1, 1, 1, w, 0],
[ 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, w^2, 0, w^2, w^2, w^2, 0, w, w, 0, w^2, 1, 0, w^2, w],
[ 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w, 1, 0, 1, w^2, w, 0, w^2, w^2, 0, 1, w, w, w],
[ 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w, w^2, 1, 1, 1, 1, 0, w, w^2, w, w, w, w^2, 1],
[ 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 1, w^2, 0, 0, 1, 0, 0, 0, 0, w, 0, w, w, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 1, w^2, 0, 0, 0, w^2, 0, 1, w, 0, w, w, w, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, 1, 0, 0, w, 0, 0, 1, 1, w^2, w^2, 1, w^2, 1, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 1, 0, 0, w, w^2, w, 0, 0, 1, 1, w^2, 1, 0, w^2, w],

```

```

[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 1, 0, w, 0, w, 0, 0, 0, 1, 0, w^2, w, w^2, 0, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, w^2, w^2, 0, w, 0, 0, w^2, w^2, w^2, 1, 0, 0, w^2, 1, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, w^2, 0, 0, 1, 1, 1, w, w, w^2, w^2, w^2, w^2, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, w^2, 1, 1, w, w^2, w^2, 1, 1, w, w, w^2, 0, w^2]>;
//CWE(a,a,b,b) : 8*a^30 + 888*a^28*b^2 + 54216*a^26*b^4 + 1191096*a^24*b^6 + 11694888*a^22*b^8 + 60110424*a^20*b^10 + 172963944*a^18*b^12
+ 290855448*a^16*b^14 + 290855448*a^14*b^16 + 172963944*a^12*b^18 + 60110424*a^10*b^20 + 11694888*a^8*b^22 + 1191096*a^6*b^24 +
54216*a^4*b^26 + 888*a^2*b^28 + 8*b^30

```

C32:=LinearCode<F, 32|

```

[ 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w, w^2, 1, 0, 1, 0, 0, 0, 0, 1, 0, 1, w^2, w],
[ 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w^2, w, 1, w^2, 0, w, w, w, 0, w^2, 1, w, w^2],
[ 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, w^2, 0, 0, w^2, w, w, w^2, w, w^2, w^2, w^2, 1, 0, 1, 1],
[ 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w, 0, 0, w, 0, w^2, w, 1, w^2, w^2, 0, 0, 1, w^2, 0],
[ 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 1, w^2, w, 0, w^2, w, 0, 0, 1, 0, w, 0, w^2, 0, 1],
[ 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w, 0, w^2, 0, 1, 0, w^2, w, 1, 0, w^2, w^2, w, 0],
[ 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w, w^2, w, 1, 0, 1, 0, w, w, 1, w^2, w^2, w, 0],
[ 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, w, w^2, w, 0, 0, 1, 0, 1, 0, w^2, 0, 1, w, w, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, w, w, 1, 0, w^2, 0, 1, 0, 1, 0, 0, w, w^2, w, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, w, w^2, w^2, 1, w, w, 0, 1, 0, 1, w, w^2, w, 0, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, w, w^2, w^2, 0, 1, w, w^2, 0, 1, 0, w^2, 0, w, w^2, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 1, 0, w^2, 0, w, 0, 1, 0, 0, w, w^2, 0, w, w^2, 1, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, w^2, 1, 0, 0, w^2, w^2, 1, w, w^2, 0, w, 0, 0, w, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 1, 1, 0, 1, w^2, w^2, w^2, w, w^2, w, w, w^2, 0, 0, w^2, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w^2, w, 1, w^2, 0, w, w, w, 0, w^2, 1, w, w^2, 0, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w, w^2, 1, 0, 1, 0, 0, 0, 0, 1, 0, 1, w^2, w, 1, 0]>;
//CWE(a,a,b,b) : 4*a^32 + 960*a^30*b^2 + 72160*a^28*b^4 + 1811264*a^26*b^6 + 21040240*a^24*b^8 + 129015744*a^22*b^10 +
451601696*a^20*b^12 + 942848320*a^18*b^14 + 1202186520*a^16*b^16 + 942848320*a^14*b^18 + 451601696*a^12*b^20 + 129015744*a^10*b^22 +
21040240*a^8*b^24 + 1811264*a^6*b^26 + 72160*a^4*b^28 + 960*a^2*b^30 + 4*b^32

```

C34:=LinearCode<F, 34|

[1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 0, w^2, 1, w^2, w^2, 1, w^2, w, 1, w, 1, 0, w, w, 1, w^2],
[0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, 1, w^2, 0, 0, w^2, w^2, w, w, 1, 1, w, w, w, 1, w^2, 1],
[0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w, 0, 1, w, 0, w^2, w^2, w^2, 0, w^2, 1, 1, w^2, 1, 1, w],
[0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, 0, w, w, w, 1, w^2, w^2, w^2, w, w^2, 1, 0, 0, w^2, w, w],
[0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w, 1, 1, w, w, 1, 1, 1, 0, 1, w, 0],
[0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, 1, w, 1, w^2, 1, 1, 0, w, w, 1, 1, 1, w, 1],
[0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w^2, 0, 1, w, 0, w, 0, w, w, 1, w^2, w^2, 1, w],
[0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w, 1, w, 0, w^2, w, w^2, w, w^2, 0, 0, w, w, 0, 1, 1],
[0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 1, w, 0, w, 1, 0, w, 1, w, w, 1, w, w^2, w^2, w, w],
[0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w, 0, w, w^2, w^2, 0, w, w^2, 0, 1, 1, w^2, w^2, w, w^2],
[0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w^2, w^2, w^2, w, w, w^2, 0, w, w, w^2, 1, w^2, w^2, w^2, 1],
[0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, w, 1, 1, w^2, 1, 1, w, w^2, 1, w^2, 1, 1, w, 1, 0, w^2, w^2],
[0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 1, 1, 1, 0, w^2, 1, w^2, w, w, 0, 0, w, 0, w, w, 0, w^2],
[0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, w, w, 1, w^2, 0, w^2, w^2, 0, 0, w, w^2, 1, 1, w, 1, 0, 1],
[0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, w, 1, 1, 1, w^2, w, w, 1, 0, w, 0, w, 0, w^2, w^2],
[0, 1, 0, 0, w, 0, w, 1, 1, 1, 1, 1, w, 1, 0, 0, 0, w, 1, 0],
[0, 1, 0, 0, 0, w, 1, w, 0, 0, 1, w^2, 0, 0, 0, w, 1, w, w^2]>:

$$//CWE(a,a,b,b) : 8*a^34 + 1128*a^32*b^2 + 92640*a^30*b^4 + 2688928*a^28*b^6 + 36321408*a^26*b^8 + 262223296*a^24*b^10 + 1096774624*a^22*b^12 + 2783874720*a^20*b^14 + 4407957840*a^18*b^16 + 4407957840*a^16*b^18 + 2783874720*a^14*b^20 + 1096774624*a^12*b^22 + 262223296*a^10*b^24 + 36321408*a^8*b^26 + 2688928*a^6*b^28 + 92640*a^4*b^30 + 1128*a^2*b^32 + 8*b^34$$

C36:=LinearCode<F, 36|

[1, 0, 1, 1, 0, 0, w^2, 0, w^2, w^2, 1, 1, w^2, w^2, 0, w^2, 0, 0, 1],
[0, 1, 0, 1, 0, 0, w^2, 0, 1, w, 1, 0, w, w, 0, 1, w, 1, 0, w^2, 0],
[0, 0, 1, 0, 1, 0, 0, w, 1, 1, w, w, 0, 1, 1, 1, 0, 1, w, 0, 0, 0],
[0, 0, 0, 1, 0, w^2, w, 0, 0, 1, 0, w^2, 0, w, w^2, 0, 0, 0, w^2, w, 1, w^2],


```

[ 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, w, 1, 1, w, w, 0, 1, 1, 1, 0, 1, w, 0],
[ 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 1, 1, 1, w, 0, 1, 1, w^2, w^2, 0, 1, w^2, 1, 0, 0, 1, w^2],
[ 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, w, 0, 1, 1, 0, w^2, 0, w^2, 0, w^2, 1, 1, 0, 1, 0, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 1, w, w^2, 1, 1, w^2, 0, w, 1, w^2, 0, 0, 0, w^2, 1, w, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 0, 0, 0, w, w^2, 0, w, 0, w, 1, w^2, w^2, w, w, 1, w, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w, 1, w, w, w^2, w^2, 1, w, 0, w, 0, w^2, w, 0, 0, 0, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w, 1, w^2, 0, 0, 0, w^2, 1, w, 0, w^2, 1, 1, w^2, w, 1, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 0, 1, 0, 1, 1, w^2, 0, w^2, 0, w^2, 0, 1, 1, 0, w, w, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 1, 0, 0, 1, w^2, 1, 0, w^2, w^2, 1, 1, 0, w, 1, 1, 1, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, w, 1, 0, 1, 1, 1, 0, w, w, 1, 1, w, 0, 0, 1, 0, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, w^2, 1, w, w^2, 0, 0, 0, w^2, w, 0, w^2, 0, 1, 0, 0, w, w^2, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, w, 1, 0, 1, 1, 1, 0, w, w, 1, 1, w, 0, 0, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, w^2, 0, 1, w, 1, 0, w, w, 0, 1, w, 1, 0, w^2, 0, 0, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 1, 0, 0, w^2, 0, w^2, w^2, 1, 1, w^2, w^2, 0, w^2, 0, 0, 1, 1, 0]>:
//CWE(a,a,b,b) : 64*a^36 + 2304*a^34*b^2 + 115776*a^32*b^4 + 3843072*a^30*b^6 + 60860160*a^28*b^8 + 507442176*a^26*b^10 +
2504617728*a^24*b^12 + 7592205312*a^22*b^14 + 14614275456*a^20*b^16 + 18152752640*a^18*b^18 + 14614275456*a^16*b^20 +
7592205312*a^14*b^22 + 2504617728*a^12*b^24 + 507442176*a^10*b^26 + 60860160*a^8*b^28 + 3843072*a^6*b^30 + 115776*a^4*b^32 +
2304*a^2*b^34 + 64*b^36

```

C38:=LinearCode<F, 38|

```

[ 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 1, w^2, 0, 0, w, 1, 1, w, 0, 0, w^2, 1, 1, 1, 1],
[ 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 1, 0, 0, w^2, w, w^2, 0, w^2, w^2, 0, w^2, w, w^2, 0, 0, 1],
[ 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 1, 0, w, w, 1, 1, 1, 0, 0, 1, 1, 1, w, w, 0, 1],
[ 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, w^2, w, 0, w, 0, w^2, w^2, 0, w, 0, w, w^2, 1],
[ 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 1, 1, 0, 1, w^2, 0, 1, 1, w, w, 0, w^2, w^2, w, 1, w, w^2],
[ 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w, w^2, w^2, w^2, w, w^2, w^2, 1, 1, 0, 0, 0, 0, w^2, 0, 1, w^2, 0],
[ 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, 1, w, 0, w^2, 0, w, 0, w, w, 1, 0, w, 0, 0, w^2, 1, 0, 0],
[ 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w^2, 0, 1, 0, 1, w^2, w, w, 0, w, 0, 0, 0, w, w^2, 0, w^2, w],

```

```

[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, 1, w, 0, w^2, 0, w, 0, w, w, 1, 0, w, 0, 0, w^2, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 1, 0, w, w^2, w^2, 1, w, w^2, 1, 0, 0, w, 1, 1, w, 1, 0, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w, w^2, w, 1, w^2, 1, w, 1, w^2, w, w, w, 1, 1, 0, 1, w^2, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w^2, 0, 0, w, 0, 1, w, w, 0, w, 0, w^2, 0, w, 1, w, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, w^2, 1, 0, w^2, 0, 0, 0, 0, 1, 1, w^2, w^2, w, w^2, w^2, w^2, w, w^2, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, w, w, w, w^2, 1, 1, 0, w, w^2, w^2, 0, 1, 0, w, 1, 1, w, 0, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, w^2, w^2, 0, w, w^2, 1, 0, 0, 1, w^2, w, 0, w^2, w^2, 0, 0, 0, 0, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, w^2, w, 1, w, w^2, w^2, 0, w, w, 1, 1, 0, w^2, 1, 0, 1, 1, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, w^2, w, 0, w, 0, w^2, w^2, 0, w, 0, w, w^2, 1, 0, 0, 0, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 1, 0, 1, w^2, w^2, w, 1, 1, w, 1, 0, w^2, 1, w, 1, 1, 0, 1, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 1, 0, 0, w^2, w, w^2, 0, w^2, w^2, 0, w^2, w, w^2, 0, 0, 1, 0, 1]>:
//CWE(a,a,b,b) : 2*a^38 + 1406*a^36*b^2 + 147630*a^34*b^4 + 5521362*a^32*b^6 + 97806984*a^30*b^8 + 945467512*a^28*b^10 +
5414950296*a^26*b^12 + 19339108200*a^24*b^14 + 44479948860*a^22*b^16 + 67156001220*a^20*b^18 + 67156001220*a^18*b^20 +
44479948860*a^16*b^22 + 19339108200*a^14*b^24 + 5414950296*a^12*b^26 + 945467512*a^10*b^28 + 97806984*a^8*b^30 + 5521362*a^6*b^32 +
147630*a^4*b^34 + 1406*a^2*b^36 + 2*b^38

```

C40:=LinearCode<F, 40|

```

[ 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1, w, w^2, w, 1, w, 1, w, 1, w^2, w^2, w^2, 0],
[ 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 0, w, 0, 1, 1, w^2, 1, 0, w, 1, 0, 0, 1, w^2, 1, 1, w^2],
[ 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 1, 1, w^2, 0, w^2, 1, w, 1, 0, w, 1, 1, 1, 1, 1, w, w^2, 1, w^2],
[ 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, w, 0, w^2, w, w, w^2, w^2, w, 0, w^2, w, w^2, w^2, w, 1, 0, w, w^2, w^2],
[ 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, w^2, 1, 0, w, 0, 0, 0, w, 1, w^2, w^2, 0, 0, 1, 1, 1, 1, 1, 1],
[ 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w^2, 1, w, 0, 0, w^2, 0, w^2, 1, w, w, 1, 1, w, 1, 0, w],
[ 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, w^2, w^2, 1, w^2, 1, 1, 1, w, 1, w, w, 0, w, w, 0, w^2, 1, 0, 1],
[ 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w, w^2, 1, w, w^2, 1, w^2, w, w, 0, 0, w, 0, w^2, 1, 1, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w^2, w, w, 1, w^2, w, w^2, w, w, w^2, w^2, w, w, 1, w^2, w, 1, w, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, w^2, 0, 1, 0, 1, 1, 0, 1, 0, w^2, w, w, w^2, w^2, w^2, w, 0, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w, w, w, w^2, 0, 1, w, 0, 1, w, w^2, 1, 0, 1, 0, 0, 1, w^2],

```

[0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w^2, w^2, 0, w, w, 1, 1, w, w, 0, w, 1, w, w^2, w, w, 1, w^2, w],
[0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, w^2, w, w, 0, w, w, 1, 1, 1, 1, w^2, w^2, 1, 0, 0, w^2, w, 1, 1],
[0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w, w, 1, w, 1, 0, 1, w, w, 1, 0, 0, w^2, 1, 1, 1],
[0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w, w^2, 1, w^2, 0, w, w, w, w, w^2, 0, w^2, 1, 1, w, 0, w, w^2, 0, 1],
[0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, w, 0, 0, w, 0, w, w, 1, 1, w^2, w^2, 1, w, w, 0, w, 1],
[0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 0, 0, w, w^2, 0, w, 0, w, 0, w, w, 1, w^2, 0, w^2, w^2, 0, 1],
[0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, w^2, 0, w, 0, w^2, 1, 1, w, w^2, w, w^2, w, 0, w^2, 0, 1, 0, 1, w^2, 1],
[0, 1, 0, 1, w, 0, w^2, 0, w^2, 0, w^2, w^2, 1, w, w^2, 1, w^2, 1, w^2, w, 1, 0, 1],
[0, 1, w^2, 1, w^2, 0, 0, w, 0, w, w^2, 0, 0, w^2, 0, w, 0, w, w, w^2, 0, 1]>;
//CWE(a,a,b,b) : 4*a^40 + 1520*a^38*b^2 + 183160*a^36*b^4 + 7674480*a^34*b^6 + 153819060*a^32*b^8 + 1695290048*a^30*b^10 +
11173784480*a^28*b^12 + 46413704640*a^26*b^14 + 125704455240*a^24*b^16 + 226760187680*a^22*b^18 + 275693427152*a^20*b^20 +
226760187680*a^18*b^22 + 125704455240*a^16*b^24 + 46413704640*a^14*b^26 + 11173784480*a^12*b^28 + 1695290048*a^10*b^30 +
153819060*a^8*b^32 + 7674480*a^6*b^34 + 183160*a^4*b^36 + 1520*a^2*b^38 + 4*b^40

C42:=LinearCode<F, 42|

[1, 0, 1, 1, w, 1, 1, w, 0, w^2, 0, 0, w, 1, 1, 1, w^2, w^2, 1, w^2, 0, 1, w],
[0, 1, 0, 1, w, w^2, w, w, w, w, w^2, 0, w^2, 0, 0, 0, 1, w, w^2, 0, w, 0, w, 1],
[0, 0, 1, 0, 1, 1, 0, 1, 0, w^2, 1, 0, w^2, w^2, w, 0, w, 0, w, 1, 0, 1, 0, 0],
[0, 0, 0, 1, 0, w^2, 1, w, 0, 1, w, 1, w, w^2, w, 1, w, 1, w^2, 1, w^2, w, 0, 0, w, w^2],
[0, 0, 0, 0, 1, 0, w^2, w^2, 0, 0, 1, 1, 1, 0, w^2, w^2, w, w^2, w, 1, w, 1, 0, 1],
[0, 0, 0, 0, 0, 1, 0, w^2, 0, 1, w^2, 0, w, 1, 1, w, 1, w^2, 0, 0, w, w^2, w, w^2, w^2],
[0, 0, 0, 0, 0, 0, 1, 0, w, w^2, 1, w^2, 0, 0, w^2, w, 1, w^2, 0, w, w, w, 0, w^2, 1, 0, w, w^2],
[0, 0, 0, 0, 0, 0, 0, 1, 0, w^2, 0, 1, 1, w, w, 0, w^2, 0, 1, 1, 1, w, w, w^2, w, w^2, w, 1, 1],
[0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w, w, 0, 1, w^2, w, 1, w, 1, w, 0, 0, 1, w, 1, w^2, 1, 0, 0, 1],
[0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w^2, 0, 0, w^2, 1, w, w, w, w^2, 1, 1, 0, 1, 0, w, w^2, w, w, 0, 1],
[0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w^2, w^2, 1, 1, 0, 1, 0, w^2, w^2, 0, 0, 1, w, 1, w^2, 1, 0, 1, w^2, 0, w],
[0, w, w^2, 0, 1, w, 1, 0, w, w, w^2, 0, w^2, 1, 0, 1, 1, 1, w, w^2, w^2, 0],
[0, w^2, w^2, 1, 1, 0, w^2, 0, 1, w^2, w, w^2, w, w, w^2, w, w, 1, w^2, 0, 0, 0],

```

[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, w, w^2, w, w^2, w^2, 1, w, w^2, 1, w, w^2, w, 1, 0, w^2, 0, 1, w, 1, w^2, w^2],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, w^2, 0, 1, w^2, 1, w, 0, w, 0, 0, 0, w, w, w, 0, w^2, 0, 1, w^2, w, 0],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 1, 0, 0, 0, w^2, 0, w, 1, w^2, 1, 1, 1, w^2, w, 0, 1, 0, w, 0, w, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 1, 1, 0, w^2, 1, w^2, 1, w^2, 0, w, 0, w^2, 1, 1, w^2, 0, w^2, 1, 1, w, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, w^2, w, 0, 1, w^2, 0, w^2, w^2, 1, 1, 1, 0, 0, 1, 1, w^2, w^2, 0, 0, w, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, w, w, 1, 0, 0, 0, 1, w, 1, 0, 1, 0, w, 0, w^2, 0, 0, w, 1, w^2, w],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, w, 1, w, w, 1, 0, 0, w^2, w^2, w^2, w^2, w^2, w, w^2, w, 0, 0, 1, 1, w, 1],
[ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, w^2, w, w, w^2, 1, 1, w^2, w, w^2, w, w^2, 0, 0, 0, 0, 1, 0, w^2, 0, 1, 1]>;
//CWE(a,a,b,b) : 8*a^42 + 2184*a^40*b^2 + 222768*a^38*b^4 + 10473008*a^36*b^6 + 236179944*a^34*b^8 + 2942627688*a^32*b^10 +
22116168256*a^30*b^12 + 105722069568*a^28*b^14 + 333015450768*a^26*b^16 + 707399106960*a^24*b^18 + 1027580954400*a^22*b^20 +
1027580954400*a^20*b^22 + 707399106960*a^18*b^24 + 333015450768*a^16*b^26 + 105722069568*a^14*b^28 + 22116168256*a^12*b^30 +
2942627688*a^10*b^32 + 236179944*a^8*b^34 + 10473008*a^6*b^36 + 222768*a^4*b^38 + 2184*a^2*b^40 + 8*b^42

```