

```

Filename:FACTORG
[[0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0]]→Mat Z↵
"NUMBER"?→F↵
If F<1 Or F≥1E10↵
Then "NUMBER MUST BE  ≥1  And <1Exp10"↵
Stop↵
IfEnd↵
If F≠Int (F)↵
Then "NUMBER MUST BE  AN INTEGER"↵
Stop↵
IfEnd↵
For 1→E To 22↵
0→Mat Z[1,E]↵
Next↵
0→Mat Z[1,1]↵
0→Mat Z[1,12]↵
0→E↵
F→A↵
Int (√(A))→C↵
2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
3→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
5→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
7→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
11→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
While 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+8→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+8→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵

```

```

B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+6→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+4→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+10→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+2→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
B+10→B:A÷B→D:Frac (D)=0⇒Prog "WFSUB":B>C⇒Goto 1↵
WhileEnd↵
↵
Lbl 1↵
If A>1↵
Then Isz E↵
A→Mat Z[1,E]↵
1→A↵
1→Mat Z[1,E+11]↵
IfEnd↵
Int (E÷6)→D↵
E-6×D>0⇒Isz D↵
1→C↵
Lbl 2↵
ClrText↵
Locate 1,1,F↵
Locate 12,1,C↵
Locate 13,1,":"↵
Locate 14,1,D↵
6×(C-1)+1→B↵
Locate 1,2,Mat Z[1,B]↵
Locate 11,2,"^("↵
Locate 13,2,Mat Z[1,B+11]↵
Locate 16,2,")"↵
If B+1≤E↵
Then Locate 1,3,Mat Z[1,B+1]↵
Locate 11,3,"^("↵
Locate 13,3,Mat Z[1,B+12]↵
Locate 16,3,")"↵
IfEnd↵
If B+2≤E↵
Then Locate 1,4,Mat Z[1,B+2]↵

```

```

Locate 11,4,"^("↵
Locate 13,4,Mat Z[1,B+13]↵
Locate 16,4,")"↵
IfEnd↵
If B+3≤E↵
Then Locate 1,5,Mat Z[1,B+3]↵
Locate 11,5,"^("↵
Locate 13,5,Mat Z[1,B+14]↵
Locate 16,5,")"↵
IfEnd↵
If B+4≤E↵
Then Locate 1,6,Mat Z[1,B+4]↵
Locate 11,6,"^("↵
Locate 13,6,Mat Z[1,B+15]↵
Locate 16,6,")"↵
IfEnd↵
If B+5≤E↵
Then Locate 1,7,Mat Z[1,B+5]↵
Locate 11,7,"^("↵
Locate 13,7,Mat Z[1,B+16]↵
Locate 16,7,")"↵
IfEnd↵
'Stop↵
While Getkey:WhileEnd↵
Do↵
Getkey→K↵
LpWhile K=0↵
While Getkey↵
WhileEnd↵
0→M↵
If K=47 Or K=44↵
Then 1→M↵
Else If K=27 Or K=37 Or K=31↵
Then 2→M↵
Else If K=28 Or K=38 Or K=41↵
Then 3→M↵
Else Goto 2↵
IfEnd:IfEnd↵
IfEnd↵
If M=1↵
Then ClrText↵
"DONE"↵
Stop↵
Else If M=2↵
Then Isz C↵
C>D⇒1→C↵
Goto 2↵
Else If M=3↵
Then C-1→C↵
C<1⇒D→C↵
Goto 2↵
IfEnd:IfEnd↵

```

```
IfEnd↵
WhileEnd↵
[0]→Mat Z
```