Program Code:

```
;Assembly language Program > Name > Graphics VGA > Through Line


.model small

.stack 100h

.data

.code


start:


;Graphics

;mode=13(VGA High resolution)


Mov ah, 0                ;set Graphics mode

mov al,13h       ;mode=13(VGA High resolution)

int 10h                  ;cursor position & invoke the interrupt to change to video mode


;-----Ain-----
```

```
Mov ah,0ch                    ;Pixel function write
Mov al,14                     ;Pixel color
Mov cx,260                    ;column
mov dx,55                     ;row

Ain:
int 10h
inc  cx                       ;to next column increment
cmp cx,270                    ;complete
jnz Ain

;-----Ain1-----
Mov ah,0ch
Mov al,14
Mov cx,235
mov dx,65

Ain1:
int 10h
```

```
inc  cx
cmp cx,270
jnz Ain1

;-----Ain2-----
Mov ah,0ch
Mov al,14
Mov cx,260
mov dx,65

Ain2:
int 10h
dec  dx
cmp dx,55
jnz Ain2

;-----baa-----
Mov ah,0ch
Mov al,14
Mov cx,250
mov dx,65
```

```
baa:
int 10h
dec  dx
cmp dx,61
jnz baa

;----Dot Baa-----
Mov ah,0ch
Mov al,14
Mov cx,248
mov dx,70

bd:
int 10h
inc  cx
cmp cx,249
jnz bd

;-----baa1-----
Mov ah,0ch
```

```
Mov al,14
Mov cx,245
mov dx,65

baa1:
int 10h
dec  dx
cmp dx,61
jnz baa1

;-----daal-----
Mov ah,0ch
Mov al,14
Mov cx,235
mov dx,71

daal:
int 10h
dec  dx
cmp dx,59
jnz daal
```

```
;-----daal1-----
Mov ah,0ch
Mov al,14
Mov cx,227
mov dx,60

daal1:
int 10h
inc  cx
cmp cx,235
jnz daal1

;-----daal2-----
Mov ah,0ch
Mov al,14
Mov cx,227
mov dx,71

daal2:
int 10h
```

```
inc  cx
cmp cx,235
jnz daal2

;-----After daal Alif-----
Mov ah,0ch
Mov al,14
Mov cx,223
mov dx,67

Alif:
int 10h
dec  dx
cmp dx,50
jnz Alif

;-----laam-----
Mov ah,0ch
Mov al,14
Mov cx,220
mov dx,63
```

```
laam:
int 10h
dec  dx
cmp dx,50
jnz laam

;-----laam1-----
Mov ah,0ch
Mov al,14
Mov cx,210
mov dx,63

laam1:
int 10h
inc  cx
cmp cx,220
jnz laam1

;-----Raa-----
Mov ah,0ch
```

```
Mov al,14
Mov cx,210
mov dx,73

Raa:
int 10h
dec  dx
cmp dx,63
jnz Raa

;-----Raa1-----
Mov ah,0ch
Mov al,14
Mov cx,203
mov dx,73

Raa1:
int 10h
inc  cx
cmp cx,210
jnz Raa1
```

```
;-----After Raa Alif1-----
Mov ah,0ch
Mov al,14
Mov cx,205
mov dx,67

Alif1:
int 10h
dec  dx
cmp dx,50
jnz Alif1

;-----faa up-----
Mov ah,0ch
Mov al,14
Mov cx,193
mov dx,55

faaup:
int 10h
```

```
inc  cx
cmp cx,201
jnz faaup

;-----faa down long-----
Mov ah,0ch
Mov al,14
Mov cx,180
mov dx,60

faadn:
int 10h
inc  cx
cmp cx,200
jnz faadn

;-----faa left-----
Mov ah,0ch
Mov al,14
Mov cx,193
mov dx,60
```

```
faal:
int 10h
dec  dx
cmp dx,55
jnz faal

;-----faa right-----
Mov ah,0ch
Mov al,14
Mov cx,200
mov dx,60

faar:
int 10h
dec  dx
cmp dx,55
jnz faar

;----Dot faa-----
Mov ah,0ch
```

```
Mov al,14
Mov cx,197
mov dx,52

fd:
int 10h
inc  cx
cmp cx,198
jnz fd

;----crass Ainn left-----
Mov ah,0ch
Mov al,14
Mov cx,176
mov dx,56

cal:
int 10h
inc  cx
inc  dx
cmp cx,236
```

```
cmp dx,60
jnz cal

;-----crass Ainn middle line-----
Mov ah,0ch
Mov al,14
Mov cx,176
mov dx,55

caml:
int 10h
inc  cx
cmp cx,185
jnz caml

;----crass Ainn Right-----
Mov ah,0ch
Mov al,14
Mov cx,184
mov dx,56
```

```
cair:
int 10h
dec  cx
inc  dx
cmp dx,68
jle cair

;-----crass Ainn down line-----
Mov ah,0ch
Mov al,14
Mov cx,173
mov dx,68

cadl:
int 10h
inc  cx
cmp cx,185
jnz cadl

;-----bin for baa-----
Mov ah,0ch
```

```
Mov al,6
Mov cx,150
mov dx,60

bfb:
int 10h
inc  cx
cmp cx,160
jnz bfb

;-----bin for baa right-----
Mov ah,0ch
Mov al,6
Mov cx,159
mov dx,60

bfbr:
int 10h
dec  dx
cmp dx,52
jnz bfbr
```

```
;----Dot Bin for baa-----
Mov ah,0ch
Mov al,6
Mov cx,154
mov dx,63

bfbd:
int 10h
inc  cx
cmp cx,155
jnz bfbd

;-----bin for baa left-----
Mov ah,0ch
Mov al,6
Mov cx,150
mov dx,70

bfbl:
int 10h
```

```
dec  dx
cmp dx,52
jnz bfbl

;-----bin for baa down-----
Mov ah,0ch
Mov al,6
Mov cx,135
mov dx,70

bfbdn:
int 10h
inc  cx
cmp cx,150
jnz bfbdn

;-----bin for baa right1-----
Mov ah,0ch
Mov al,6
Mov cx,135
mov dx,70
```

```
bfbrl:
int 10h
dec  dx
cmp dx,52
jnz bfbrl

;----Dot Bin for noon-----
Mov ah,0ch
Mov al,6
Mov cx,143
mov dx,60

bfbn:
int 10h
inc  cx
cmp cx,144
jnz bfbn

;-----Ain f-----
```

```
Mov ah,0ch                          ;Pixel function write
Mov al,3                            ;Pixel color
Mov cx,115                          ;column
mov dx,55                           ;row

Ainf:
int 10h
inc  cx                             ;to next column increment
cmp cx,125                          ;complete
jnz Ainf

;-----Ainf1-----
Mov ah,0ch
Mov al,3
Mov cx,90
mov dx,65

Ainf1:
int 10h
```

```
inc  cx
cmp cx,125
jnz Ainf1

;-----Ainf2-----
Mov ah,0ch
Mov al,3
Mov cx,115
mov dx,65

Ainf2:
int 10h
dec  dx
cmp dx,55
jnz Ainf2

;-----baa f right-----
Mov ah,0ch
Mov al,3
Mov cx,105
mov dx,65
```

```
baaf:
int 10h
dec  dx
cmp dx,61
jnz baaf

;----Dot Baa f-----
Mov ah,0ch
Mov al,3
Mov cx,102
mov dx,70

bdf:
int 10h
inc  cx
cmp cx,103
jnz bdf

;-----baa1 left-----
Mov ah,0ch
```

```
Mov al,3
Mov cx,100
mov dx,65

bal1:
int 10h
dec  dx
cmp dx,61
jnz bal1

;-----daal f -----
Mov ah,0ch
Mov al,3
Mov cx,90
mov dx,71

daalf:
int 10h
dec  dx
cmp dx,59
jnz daalf
```

```
;-----daal1 f-----
Mov ah,0ch
Mov al,3
Mov cx,82
mov dx,60

daalf1:
int 10h
inc  cx
cmp cx,90
jnz daalf1

;-----daal2 f-----
Mov ah,0ch
Mov al,3
Mov cx,82
mov dx,71

daalf2:
int 10h
```

```
inc  cx
cmp cx,90
jnz daalf2

;-----After daal Alif f-----
Mov ah,0ch
Mov al,3
Mov cx,78
mov dx,67

Aliff:
int 10h
dec  dx
cmp dx,50
jnz Aliff

;-----laam f-----
Mov ah,0ch
Mov al,3
Mov cx,75
mov dx,63
```

```
laamf:
int 10h
dec  dx
cmp dx,50
jnz laamf

;-----laam1 f-----
Mov ah,0ch
Mov al,3
Mov cx,65
mov dx,63

laamf1:
int 10h
inc  cx
cmp cx,75
jnz laamf1

;-----Raa f-----
Mov ah,0ch
```

```
Mov al,3
Mov cx,65
mov dx,73

Raaf:
int 10h
dec  dx
cmp dx,63
jnz Raaf

;-----Raa1 f-----
Mov ah,0ch
Mov al,3
Mov cx,58
mov dx,73

Raaf1:
int 10h
inc  cx
cmp cx,65
jnz Raaf1
```

```
;-----sheen f-----
Mov ah,0ch
Mov al,3
Mov cx,35
mov dx,65

sheenf:
int 10h
inc  cx
cmp cx,55
jnz sheenf

;-----sheen f right-----
Mov ah,0ch
Mov al,3
Mov cx,55
mov dx,65

sheenfr:
int 10h
```

```
dec  dx
cmp dx,61
jnz sheenfr

;-----sheen f middle-----
Mov ah,0ch
Mov al,3
Mov cx,50
mov dx,65

sheenfm:
int 10h
dec  dx
cmp dx,61
jnz sheenfm

;-----sheen f left-----
Mov ah,0ch
Mov al,3
Mov cx,45
mov dx,65
```

```
sheenfl:
int 10h
dec  dx
cmp dx,61
jnz sheenfl

;-----sheen daal f -----
Mov ah,0ch
Mov al,3
Mov cx,35
mov dx,71

shdaalf:
int 10h
dec  dx
cmp dx,59
jnz shdaalf

;-----daal1 f-----
Mov ah,0ch
```

```
Mov al,3
Mov cx,27
mov dx,60

shdaalf1:
int 10h
inc  cx
cmp cx,35
jnz shdaalf1

;-----daal2 f-----
Mov ah,0ch
Mov al,3
Mov cx,27
mov dx,71

shdaalf2:
int 10h
inc  cx
cmp cx,35
jnz shdaalf2
```

```
;----Dot for sheen-----
Mov ah,0ch
Mov al,3
Mov cx,47
mov dx,60

dfsh:
int 10h
inc  cx
cmp cx,48
jnz dfsh

;----Dot for sheen1-----
Mov ah,0ch
Mov al,3
Mov cx,51
mov dx,60

dfsh1:
int 10h
```

```
inc  cx
cmp cx,52
jnz dfsh1

;----Dot for sheen2-----
Mov ah,0ch
Mov al,3
Mov cx,49
mov dx,57

dfsh2:
int 10h
inc  cx
cmp cx,50
jnz dfsh2

;----Dot yaa f-----
Mov ah,0ch
Mov al,3
Mov cx,39
mov dx,70
```

```
ydf:
int 10h
inc  cx
cmp cx,40
jnz ydf

;----Dot yaa1 f-----
Mov ah,0ch
Mov al,3
Mov cx,42
mov dx,70

ydf1:
int 10h
inc  cx
cmp cx,43
jnz ydf1

Mov ah,0                                    ;read keyboard
```

```
int 16h                                   ;int 16h will
communicate with keyboard



Mov ax,3                                  ;set text mode
int 10h


mov ah, 4ch                               ;exit
int 21h
end start
```

Output: