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Section B

Task1

```
.model small
.stack 1024
.data
arr1 dw 0,0,0,0,0
var1 dw ?
temp dw ?
.code
main proc
mov ax, @data
mov ds, ax
mov si, 0
mov cx, 5
input:
mov ah, 01h
int 21h
cmp al, 13
JE stopper
sub al, 48
mov ah, 0
mov temp, ax
mov ax, 0
mov ax, arr1[si]
mov bl, 10
mul bl
add ax, temp
mov arr1[si], ax
```

```

jmp input
stopper:
add si, 2
loop input
mov ah, 4ch
int 21h
main endp
end main

```

```

6
C:\>ml q1_s.asm
Microsoft (R) Macro Assembler Version 6.11
Copyright (C) Microsoft Corp 1981-1993. All rights reserved.

Assembling: q1_s.asm

Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992
Copyright (C) Microsoft Corp 1984-1992. All rights reserved.

Object Modules [.obj]: q1_s.obj
Run File [q1_s.exe]: "q1_s.exe"
List File [nul.map]: NUL
Libraries [.lib]:
Definitions File [nul.def]:

C:\>q1_s.exe
1
3
4
2
5
C:\>

```

Activate
 Windows
 Go to Settings
 to activate
 Windows.

Task2

```

.model small
.stack 1024
.data
arr1 dw 0,0,0,0,0
temp dw ?
.code
main proc
mov ax, @data

```

```
mov ds, ax
mov ax, 0
mov bx, 1
mov cx, 5
l1:
push cx
mov cx, bx
l2:
mov dx, '*'
mov ah, 02h
int 21h
loop l2
mov dx, 10
mov ah, 02h
int 21h
mov dx, 13
mov ah, 02h
int 21h
inc bx
pop cx
loop l1
mov ah, 4ch
int 21h
main endp
end main
```

```
Run File [q1_s.exe]: "q1_s.exe"
List File [nul.map]: NUL
Libraries [.lib]:
Definitions File [nul.def]:

C:\>q1_s.exe
*
**
***
****
*****
C:\>
```

Task3

```
.model small
.stack 1024
.data
arr1 dw 0,0,0,0,0
temp dw ?
.code
main proc
mov ax, @data
mov ds, ax
mov ax, 0
mov bx, 5
mov cx, 5
l1:
push cx
mov cx, bx
l2:
mov dx, '*'
mov ah, 02h
int 21h
```

```

loop l2

mov dx, 10

mov ah, 02h

int 21h

mov dx, 13

mov ah, 02h

int 21h

dec bx

pop cx

loop l1

mov ah, 4ch

int 21h

main endp

end main

```

```

*****
C:\>ml q1_s.asm
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Assembling: q1_s.asm

Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992
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Object Modules [.obj]: q1_s.obj
Run File [q1_s.exe]: "q1_s.exe"
List File [nul.map]: NUL
Libraries [.lib]:
Definitions File [nul.def]:

C:\>q1_s.exe
*****
****
***
**
*
C:\>

```

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Task4

```

.model small

.stack 1024

```

```
.data
.code
main proc
mov ax, @data
mov ds, ax
mov dx, 0
mov bx, 0
mov cx, 26
mov bl, 'A'
l1:
mov dl, bl
mov ah, 02h
int 21h
inc bl
mov dx, 0
loop l1
mov ah, 4ch
int 21h
main endp
end main
```

```
C:\>q1_s.exe
```

```
*****  
*****  
****  
***  
**  
*
```

```
C:\>ml q1_s.asm
```

```
Microsoft (R) Macro Assembler Version 6.11
```

```
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```

```
Assembling: q1_s.asm
```

```
Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992
```

```
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```

```
Object Modules [.obj]: q1_s.obj
```

```
Run File [q1_s.exe]: "q1_s.exe"
```

```
List File [nul.map]: NUL
```

```
Libraries [.lib]:
```

```
Definitions File [nul.def]:
```

```
C:\>q1_s.exe
```

```
ABCDEFGHIJKLMNOPQRSTUVWXYZ
```

```
C:\>_
```

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Windows
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to activate
Windows.