COA Assignment 8

Q1. division of 8 bit

```
; You may customize this and other start-up templates;
; The location of this template is c:\emu8086\inc\0_com_template.txt
 org 100h
 .data
 msg1 db 'Quotient:$'
 msg2 db 'reminder :$'

.code
main proc

mov ax,10
mov bl,7

div bl

mov ch,al
mov cl,ah



mov dx,offset msg2

mov ah,9
INT 21h
mov dl,ch
add dl,48
 mov ah,2
 INT 21h
```

```
 mov dx,10
 mov ah,2
 INT 21h

 mov dx,13
 mov ah,2
 INT 21h

 mov dx,offset msg2

mov ah,9
INT 21h


 mov dl,cl
 add dl,48
 mov ah,2
 INT 21h


main endp

end main
```

Q2. division of 16 bit

```
; You may customize this and other start-up templates;
; The location of this template is c:\emu8086\inc\0_com_template.txt
```

```
 org 100h
 .data
 msg1 db 'Quotient:$'
 msg2 db 'reminder :$'
 quot dw ?
.code
main proc

mov ax,258
mov bx,256

div bx

mov quot,ax
mov cx,dx



mov dx,offset msg2

mov ah,9
INT 21h

mov dx,cx
add dx,48
 mov ah,2
 INT 21h

 mov dx,10
 mov ah,2
 INT 21h
```

```
 mov dx,13
 mov ah,2
 INT 21h

 mov dx,offset msg2

mov ah,9
INT 21h



mov dx,quot
add dx,48
 mov ah,2
 INT 21h



main endp

end main
```

Q3. multiplication of 8 bit

```
org 100h

.data
msg1 db 'Product: $'
msg2 db 'Carry $'
var1 db ?

.code
```

```
main proc
    mov ax,@data
    mov ds,ax

    mov al,5
    mov bl,4
    mul bl
    AAM

    mov cl,al
    mov ch,ah

    mov dx,offset msg1
    mov ah,9
    INT 21h

    mov dl,ch
    add dl,48
    mov ah,2
    INT 21h

    mov dl,cl
    add dl,48
    mov ah,2
    INT 21h

main endp
end main
```

Q4 multiplication of 16 bit

```
org 100h
.data

msg1 db 'product: $'
msg2 db 'carry: $'

.code

main proc
    mov ax,@data
    mov ds,ax

    mov ax,10
    mov bx,12
    mul bx



    mov cx,ax
    mov bx,dx

    mov dx,offset msg1
    mov ah,9
    int 21h

    mov ax,bx
    AAM
    mov dx,ax
    add dx,48
    mov ah,2
```

```
    int 21h

    mov ax,cx
    AAM
   mov dx,ax
   add dx,48
   mov ah,2
   int 21h

   mov dl,cf
    mov ah,2
   int 21h


   main endp
end main
```