**Coal lab Assignment 2**

Name: Syed Muzzamil Waseem

SID: 11067

Question 1

CODE:

;Syed Muzzamil Waseem 11067

;Coal Assignment2 Question 1

Include Irvine32.inc

.data

.code

main proc

mov eax,0

mov ebx,0

mov ax,4

call writeint

call crlf

mov bx,ax

shl bx,2

mov ax,bx

call writedec

call crlf

exit

main endp

end main

OUTPUT:

A screenshot of a computer

Description automatically generated

Question 2

CODE:

;Syed Muzzamil Waseem 11067

;Coal Assignment2 Question 2

Include Irvine32.inc

.data

summ dword 0

.code

main proc

push 1

push 1

push 0

push 6

push 7

mov ecx,5

mov esi,0

l1:

mov eax,[esp+esi]

add summ,eax

add esi,4

loop l1

mov eax,summ

call writedec

call crlf

exit

main endp

end main

OUTPUT:

A picture containing text, screenshot, computer, computer

Description automatically generated

Question 3

CODE:

;Syed Muzzamil Waseem 11067

;Coal Assignment2 Question 2

Include Irvine32.inc

.data

msg1 byte 'Even numbers from Given Range',0

.code

main proc

mov edx,0

mov ecx,11

mov eax,10

.while(ecx>eax)

mov esi,eax

mov ebx,2

div ebx

mov eax,esi

.if edx==0

mov edx,offset msg1

call writestring

call writeint

call crlf

.endif

mov edx,0

dec eax

.endw

exit

main endp

A computer screen capture

Description automatically generated with medium confidenceend main

Question 4

CODE:

;Syed Muzzamil Waseem 11067

;Coal Assignment2 Question 2

Include Irvine32.inc

.data

char byte ?

v1 byte "Enter the character: ",0

v2 byte "Valid Character",0

v3 byte "Invalid Character",0

.code

main proc

mov edx, offset v1

call writestring

call readchar

call writechar

call crlf

mov char, al

.if char == "y"

mov edx, offset v2

call writestring

call crlf

.elseif char == "Y"

mov edx, offset v2

call writestring

call crlf

.else

mov edx, offset v3

call writestring

call crlf

.endif

exit

MAIN ENDP

END MAIN

OUTPUT:

A screenshot of a computer

Description automatically generated with medium confidence

A screenshot of a computer

Description automatically generated with medium confidence