**Name: Saira kousar**

**Semester: BSCS-3**

**Sap-Id: 55503**

**COAL LAB Stack**

==========================================================================================================================================================================

**Task # 01**

.model small

.stack

.data

.code

main proc

mov ax,@data

mov ds,ax

mov cx,9

Pp1:

mov ah,1

int 21h

mov bx,ax

push bx

mov dx,32

mov ah,2

int 21h

inc bx

loop Pp1

mov cx, 9

poop:

mov dx,32

mov ah,2

int 21h

pop dx

mov ah,2

int 21h

loop poop

mov ah,4ch

int 21h

main endp

end main

**Task # 02**

.model small

.stack

.data

.code

main proc

mov ax,'4'

push ax

mov bx,'5'

push bx

pop ax

pop bx

mov dx,ax

mov ah,2

int 21h

mov dx,bx

mov ah,2

int 21h

mov ah,4ch

int 21h

main endp

end main

**Task # 03**

.model small

.stack

.data

.code

main proc

mov ax,@data

mov ds,ax

mov cx,5

Pp1:

mov ah,1

int 21h

mov bx,ax

push bx

mov dx,32

mov ah,2

int 21h

inc bx

loop Pp1

mov cx, 5

poop:

mov dx,32

mov ah,2

int 21h

pop dx

mov ah,2

int 21h

loop poop

mov ah,4ch

int 21h

main endp

end main

**Task# 04**

.model small

.stack 100h

.data

arr db 6 dup(0)

.code

main proc

mov ax, @data

mov ds, ax

mov cx, 10

mov si, 0

input\_loop:

mov ah, 1

int 21h

sub al, '0'

mov arr[si], al

inc si

loop input\_loop

mov cx, 10

mov si, 0

even\_check:

mov al, arr[si]

test al, 1

jnz skip\_push

push ax

skip\_push:

inc si

loop even\_check

display\_less\_than\_6:

mov cx, 10

display\_loop:

pop ax

cmp al, 6

jae skip\_display

mov dl, al

add dl, '0'

mov ah, 2

int 21h

skip\_display:

loop display\_loop

mov ah, 4Ch

int 21h

main endp

end main

**Task # 05**

.model small

.stack

.data

p1 DB 49,50,51,52,53

.code

main proc

mov ax,@data

mov ds,ax

mov si, offset p1

mov cx,5

Pp1:

mov bx, [si]

push bx

inc si

loop Pp1

mov cx, 5

poop:

pop dx

mov ah,2

int 21h

loop poop

mov ah,4ch

int 21h

main endp

end main