

```

#include<stdio.h>

int stack[100],choice,n,top,x,i;

void push(void);

void pop(void);

void display(void);

int main()
{
    printf("S. Naveen Kumar Reddy \n191911494\n");
    top=-1;
    printf("\n Enter the size of STACK[MAX=100]:");
    scanf("%d",&n);
    printf("\n\t STACK OPERATIONS USING ARRAY");
    printf("\n\t-----");
    printf("\n\t 1.PUSH\n\t 2.POP\n\t 3.DISPLAY\n\t 4.EXIT");
do
{
    printf("\n Enter the Choice:");
    scanf("%d",&choice);
    switch(choice)
    {
        case 1:
        {
            push();
            break;
        }
        case 2:
        {
            pop();
            break;
        }
        case 3:

```

```
{
display();
break;
}
case 4:
{
printf("\n\t EXIT POINT ");
break;
}
default:
{
printf ("\n\t Please Enter a Valid Choice(1/2/3/4)");
}

}
}
while(choice!=4);
return 0;
}
void push()
{
if(top>=n-1)
{
printf("\n\tSTACK is over flow");

}
else
{
printf(" Enter a value to be pushed:");
scanf("%d",&x);
top++;
```

```

stack[top]=x;
}
}
void pop()
{
    if(top<=-1)
    {
        printf("\n\t Stack is under flow");
    }
    else
    {
        printf("\n\t The popped elements is %d",stack[top]);
        top--;
    }
}
void display()
{
    if(top>=0)
    {
        printf("\n The elements in STACK \n");
        for(i=top; i>=0; i--)
            printf("\n%d",stack[i]);
        printf("\n Press Next Choice");
    }
    else
    {
        printf("\n The STACK is empty");
    }
}

```

```
C:\Users\nagir\OneDrive\Documents\exp 11.exe
S. Naveen Kumar Reddy
191911494

Enter the size of STACK[MAX=100]:4

    STACK OPERATIONS USING ARRAY
    -----
    1.PUSH
    2.POP
    3.DISPLAY
    4.EXIT
Enter the Choice:2

    Stack is under flow
Enter the Choice:3

The STACK is empty
Enter the Choice:1
Enter a value to be pushed:2

Enter the Choice:1
Enter a value to be pushed:3

Enter the Choice:4

    EXIT POINT
    -----
Process exited after 33.97 seconds with return value 0
Press any key to continue . . .
```