

```

#include<stdio.h>

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

void push(void);

void pop(void);

void display(void);

int main()
{
    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\Lenovo\Desktop\ds\STACK OPERATIONS.exe
Enter the size of STACK[MAX=100]:5

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

The STACK is empty
Enter the Choice:3

The STACK is empty
Enter the Choice:1
Enter a value to be pushed:34

Enter the Choice:3

The elements in STACK
34
Press Next Choice
Enter the Choice: _
```