```
#include<stdio.h>
#include<conio.h>
int stack[100],choice,n,top,x,i;
void push();
void pop();
void display();
void main()
{
   //clrscr();
   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)");
        }
        getch();
        }
    }
    while(choice!=4);
}
void push()
{
    if(top>=n-1)
    {
        printf("\n\tSTACK is over flow");
        getch();
    }
    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");
    }
}
```