PROGRAM:7

#include<stdio.h>

int stack[100],i,j,choice=0,n,top=-1;

int push();

int pop();

int show();

int main()

{

printf("Enter no.of elements in the stack ");

scanf("%d",&n);

printf("\*\*Stack operations using array\*\*");

printf("\n------------------\n");

printf("\n1.Push\n2.Pop\n3.Show\n4.Exit");

do

{

printf("\n Enter your choice \n");

scanf("%d",&choice);

switch(choice)

{

case 1:

{

push();

break;

}

case 2:

{

pop();

break;

}

case 3:

{

show();

break;

}

case 4:

{

printf("Exiting....");

break;

}

default:

{

printf("Please Enter valid choice \n");

}

}

}

while(choice!=4);

return 0;

}

int push ()

{

int val;

if (top == n )

printf("\n Overflow");

else

{

printf("Enter the value?");

scanf("%d",&val);

top = top +1;

stack[top] = val;

}

return 0;

}

int pop ()

{

if(top == -1)

printf("Underflow");

else

top = top -1;

return 0;

}

int show()

{

for (i=top;i>=0;i--)

{

printf("%d\n",stack[i]);

}

if(top == -1)

{

printf("Stack is empty");

}

return 0;

}

OUTPUT:

