```
#include <stdio.h>
#define size 5
int top = -1;
void push (int [], int );
int pop (int []);
void display (int []);
int main()
{
int a[5];
int choice, element;
int ch;
do
{
printf ("Enter your choice \n");
printf ("1. Push \n");
printf ("2. Pop \n");
printf ("3. Display \n");
scanf ("%d", &choice);
switch (choice)
{
case 1: printf ("Enter the element to be pushed \n");
        scanf ("%d", &element);
        push (a, element);
        break;
case 2: element = pop (a);
        if (element == -1)
          printf ("Stack underflow \n");
        else
        printf ("Poped element is %d \n", elem);
        break;
case 3: display (a);
        break;
```

```
default : printf("Invalid choice\n");
}
printf("Do you want to continue click -1\n");
scanf("%d", &ch);
} while(ch == -1);
return 0;
}

void push(int a[], int ele)
{
  if(top == size-1)
  {
   printf("stack overflow");
  }
  else
  {
   top++;
   a[top] = ele;
  }
}
int pop(int a[])
{
  int ele;
  if(top == -1)
   return -1;
  else
  {
   ele = a[top];
   top--;
   return(ele);
  }
}
```

```
void display (int a[])
{
int i;
printf ("The stack elems\n");
for(i=top ; i>=0 ; i--)
  {
    printf ("%d", a[i]);
  }
printf ("\n");
```