//Array Implementation Of Stack//

#include<stdio.h>

#include<stdlib.h>

#define size 5

void push();

void pop();

void display();

int top=-1,inp\_arr[size];

int main()

{

int choice;

while(1)

{

printf("operation performed by the stack");

printf("\n 1.push \n 2.pop \n 3. display \n 4.exit \n");

printf("enter the operation performed by the stack\n");

scanf("%d",&choice);

switch(choice)

{

case 1:push();

break;

case 2:pop();

break;

case 3:display();

break;

case 4:exit(0);

default:printf("invalid entry\n");

}

}

return 0;

}

void push()

{

int x;

if(top==size-1)

{

printf("overflow\n");

}

else

{

printf("enter the value to be inserted\n");

scanf("%d",&x);

top=top+1;

inp\_arr[top]=x;

}

}

void pop()

{

if(top==-1)

{

printf("underflow\n");

}

else

{

printf("popped element is %d\n",inp\_arr[top]);

}

top=top-1;

}

void display()

{

if(top==-1)

{

printf("underflow\n");

}

else

{

printf("elements present in the stack are\n");

}

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

{

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

}

}