#include <stdio.h>

#include <stdlib.h>

#define SIZE 4

Int top = -1, inp\_array[SIZE];

Void push();

Void pop();

Void show();

Int main()

{

Int choice;

While (1)

{

Printf(“\nPerform operations on the stack:”);

Printf(“\n1.Push the element\n2.Pop the element\n3.Show\n4.End”);

Printf(“\n\nEnter the choice: “);

Scanf(“%d”, &choice);

Switch (choice)

{

Case 1:

Push();

Break;

Case 2:

Pop();

Break;

Case 3:

Show();

Break;

Case 4:

Exit(0);

Default:

Printf(“\nInvalid choice!!”);

}

}

}

Void push()

{

Int x;

If (top == SIZE – 1)

{

Printf(“\nOverflow!!”);

}

Else

{

Printf(“\nEnter the element to be added onto the stack: “);

Scanf(“%d”, &x);

Top = top + 1;

Inp\_array[top] = x;

}

}

Void pop()

{

If (top == -1)

{

Printf(“\nUnderflow!!”);

}

Else

{

Printf(“\nPopped element: %d”, inp\_array[top]);

Top = top – 1;

}

}

Void show()

{

If (top == -1)

{

Printf(“\nUnderflow!!”);

}

Else

{

Printf(“\nElements present in the stack: \n”);

For (int I = top; I >= 0; --i)

Printf(“%d\n”, inp\_array[i]);

}

}