

LAB PROGRAM I :-

```
#include <stdio.h>
```

```
#include <conio.h>
```

```
#define STACK_SIZE = 5
```

```
int top = -1;
```

```
int s[10];
```

```
int item;
```

```
void push()
```

```
{
```

```
if (top == STACK_SIZE - 1)
```

```
{
```

```
printf("Stack overflow");
```

```
}
```

```
top = top + 1
```

```
s[top] = item;
```

```
}
```

```
int pop()
```

```
{
```

```
if (top == -1) return -1;
```

```
return s[top--];
```

```
}
```

```
void display()
```

```
{
```

```
int i;
```

```
if (top == -1)
```

```
{  
printf("Stack is empty");
```

```
return;
```

```
}
```



```

printf("content of the stack");
for (i = top; i >= 0; i--)
{
    printf("%d", s[i]);
}
}

```

```

int main()
{

```

```

    int item_deleted;
    int choice;
    for (;;)
    {

```

```

        printf("\n 1.push\n 2.pop\n 3.display\n 4.exit\n");
        printf("Enter the choice");
        scanf("%d", &choice);
        switch(choice)
        {

```

case 1:

```

            printf("Enter the item to be added");
            scanf("%d", &item);
            push();
            break;

```

case 2:

```

            item_deleted = pop();
            if (item_deleted == -1)
                printf("Stack is empty");

```



```

else
    printf("Item deleted is %d\n", item_deleted);
case break;
case 3: display();
        break;
default: exit(0);
    }
}
return 0;
}

```