

SOURCE CODE

```
#include<iostream>
using namespace std;
class stack{
    int *a;
    int top;
    int cap;
public:
    stack(int val){
        cap=val;
        top=-1;
        a=new int[val];
    }
    int isEmpty(){
        if(top== -1){
            return 1;
        }
        return 0;
    }
    int isFull(){
        if(top==cap-1){
            return 1;
        }
        return 0;
    }
    void push(int item){
        if(isFull()){
            cout<<"Stack overflow"<<endl;
            return;
        }
        a[++top]=item;
    }
    int pop(){
        if(isEmpty()){
            cout<<"Stack underflow"<<endl;
            return -1;
        }
        return a[top--];
    }
};

int main(){
    stack ob(4);
    ob.push(1);
    ob.push(2);
    ob.push(3);
    ob.push(4);
    ob.push(5);
    cout<<ob.pop()<<endl;
    cout<<ob.pop()<<endl;
```

```
    cout<<ob.pop()<<endl;
    cout<<ob.pop()<<endl;
    cout<<ob.pop()<<endl;
    return 0;
}
```

OUTPUT

```
PS C:\Users\anil kumar\Documents\anil\vscode\DataStructure_in_nsut> cd "c:\Users\anil kumar\Documents\anil\vscode"
\n" ; if ($?) { g++ -std=c++17 8_Stack.cpp -o 8_Stack } ; if ($?) { .\8_Stack }
Stack overflow
4
3
2
1
Stack underflow
-1
PS C:\Users\anil kumar\Documents\anil\vscode\DataStructure_in_nsut>
```