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//Stack (ADT) Implementation using Array
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#include<iostream>
#define SIZE 5
int value;
using namespace std;
class STACK
{
    private:
        int s[5];
        int top;
        int size;
    public:
        int pop();
        void push(int info);
        STACK(){top=-1;size=SIZE;}
};

void STACK::push(int info)
{
    //Check for overflow
    if(top==size-1)
    {
        cout<<"Stack is already full..\n can't insert";
        return;
    }
    else
    {
        top=top+1;
        s[top]=info;
    }
}

int STACK::pop()
{
    //check for underflow
    if(top==-1)
    {
        cout<<"Stack is Empty...\n";
        return 0;
    }
    else
    {
        value=s[top];
        top--;
        return value;
    }
}

int main()
{
    int flag=0;
    int choice;
    STACK S1;
    while(flag==0)
    {
        cout<<"Choose an option\n";
        cout<<"1. push \n2. pop \n3. exit\n";
        cin>>choice;

```

```
switch(choice)
{
    case 1:
        cout<<"Enter value to push\n";
        cin>>value;
        S1.push(value);
        break;
    case 2:
        value = S1.pop();
        cout<<value<<" popped\n";
        break;
    case 3:
        cout<<"Exiting program..\n";
        return 0;
        break;
}
return 0;
}
```