```
#include <iostream>
using namespace std;
class Stack
       struct node
              node *next;
              int value;
       public:
              node(int value)
                     this->value = value;
                     next = nullptr;
       };
       node *head;
       int temp;
public:
       Stack()
       {
              head = nullptr;
       void push(int value)
              node *newnode = new node(value);
              if (!head)
              {
                     head = newnode;
              }
              else
              {
                     newnode->next = head;
                     head = newnode;
              }
       }
       int pop()
              if (!head)
              {
                     throw "stack underflow";
              }
              else
              {
                     temp = head->value;
                     head = head->next;
                     return temp;
              }
       }
};
int main()
{
       Stack s1;
       s1.push(10);
       int i = 0;
       for (i = 0; i < 10; i++)
              cout << i << endl;</pre>
```

```
s1.push(i);
}
for (i = 0; i < 10; i++)
{
      cout << s1.pop() << endl;
}
int num;
cin >> num;
```

}

```
0
1
2
3
4
5
6
7
8
9
pop
9
8
7
6
5
4
3
2
1
```