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#include<iostream>
#include <vector>
using namespace std;

template<class T>

class Stack{
public:
    vector<T> stack;

    //push method
    T push(T item){

        stack.insert(stack.begin(),item);
        cout<<"Added "<<item<<endl;
        return item;
    }

    T pop(){
        if (stack.empty()){
            cout<<"nothing to pop here";
            T i;
            return (i);
        }
        else{
            T item=stack.front();
            stack.erase(stack.begin());
            return item;
        }
    }

    T peek(){
        if (stack.empty()){
            cout<<"nothing to pop here";
            T i;
            return i;
        }
        else{
            T item=stack.front();
            return item;
        }
    }

}

void display(){
    cout<<"\n\nDisplay Stack: \n\n";
    for(T i: stack){
        cout<<i<<" ";
    }
    cout<<endl<<endl;
}

};

int main(){
    Stack<int> s;

    //array of values to add to the Stack

    int arr[]={6,3,8,1,5,7,9,0,2,4};
```

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for(int i: arr){
    s.push(i);
}

s.display();

cout<<"test pop by popping top 3 elements\n\n";

for(int i=0; i<3;i++){
    s.pop();
}

s.display();

cout<<"view the new top element using peek\n\n";

cout<<"The top element is "<<s.peek()<<endl;

return 0;
}
```