1.

#include "ArrayStack.h"

#include <iostream>

#include <string>

using namespace std;

int main(){

ArrayStack<string> sStack;

sStack.push("Jill");

sStack.push("Jane");

sStack.push("Jamie");

cout<<sStack.peek()<<endl;

sStack.pop();

cout<<sStack.peek()<<endl;

sStack.pop();

cout<<sStack.peek()<<endl;

}

3a.

#include "ArrayStack.h"

#include <iostream>

#include <string>

using namespace std;

int main(){

ArrayStack<string> sStack;

ArrayStack<string> tStack;

sStack.push("Jill");

sStack.push("Jane");

sStack.push("Jamie");

while(!sStack.isEmpty()){

tStack.push(sStack.peek());

sStack.pop();

}

while(!tStack.isEmpty()){

cout<<tStack.peek()<<endl;

tStack.pop();

}

}

3b.

#include "ArrayStack.h"

#include <iostream>

#include <string>

using namespace std;

int main(){

ArrayStack<string> sStack;

ArrayStack<string> tStack;

sStack.push("Jill");

sStack.push("Jane");

sStack.push("Jamie");

tStack=sStack;

int count=0;

while(!tStack.isEmpty()){

tStack.pop();

count++;

}

cout<<"Total number of items in the Stack "<<count<<endl;

}

3c.

#include "ArrayStack.h"

#include <iostream>

#include <string>

using namespace std;

int main(){

ArrayStack<string> sStack;

ArrayStack<string> tStack;

sStack.push("Jill");

sStack.push("Jane");

sStack.push("Jamie");

//remove Jane

while(!sStack.isEmpty()){

if(sStack.peek()=="Jane"){

sStack.pop();

}

else{

tStack.push(sStack.peek());

sStack.pop();

}

}

while(!tStack.isEmpty()){

sStack.push(tStack.peek());

tStack.pop();

}

while(!sStack.isEmpty()){

cout<<sStack.peek()<<endl;

sStack.pop();

}

}