**Stack ..** Artful

# Functions : empty() – Returns whether the stack is empty.. size() – Returns the size of the stack. top() – Returns a reference to the top most element of the stack. push(g) – Adds the element ‘g’ at the top of the stack. pop() – Deletes the top most element of the stack.

Swap( , ) –Swaps two stack.

void showstack(stack <int> gq)

{

stack <int> g = gq;

while (!g.empty())

{

cout << ' ' << g.top();

g.pop();

}

cout << '\n';

}

int main ()

{

stack <int> gquiz;

gquiz.push(10);

gquiz.push(30);

gquiz.push(20);

gquiz.push(1);

gquiz.push(5);

cout << "The stack gquiz is : ";

showstack(gquiz);

cout << "\ngquiz.size() : " << gquiz.size();

cout << "\ngquiz.top() : " << gquiz.top();

cout << "\ngquiz.pop() : ";

gquiz.pop();

showstack(gquiz);

stack<int> foo,bar;

foo.push (10);

foo.push(20);

foo.push(30);

bar.push (111);

bar.push(222);

swap(foo,bar);

cout << "size of foo: " << foo.size() <<endl;

cout << "size of bar: " << bar.size() <<endl;

return 0;

}

Output

The stack gquiz is : 5 1 20 30 10

gquiz.size() : 5

gquiz.top() : 5

gquiz.pop() : 1 20 30 10

size of foo: 2

size of bar: 3