Queue .. Artful

**The functions supported by queue are :**

1. empty() – Returns whether the queue is empty
2. size() – Returns the size of the queue
3. front() – Returns a reference to the first element of the queue
4. back() – Returns a reference to the last element of the queue
5. push(g) – Adds the element ‘g’ at the end of the queue
6. pop() – Deletes the first element of the queue

void showq(queue <int> gq)

{

queue <int> g = gq;

while (!g.empty())

{

cout << '\t' << g.front();

g.pop();

}

cout << '\n';

}

int main()

{

queue <int> gquiz;

gquiz.push(10);

gquiz.push(20);

gquiz.push(30);

cout << "The queue gquiz is : ";

showq(gquiz);

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

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

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

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

gquiz.pop();

showq(gquiz);

return 0;

}

Output

The queue gquiz is : 10 20 30

gquiz.size() : 3

gquiz.front() : 10

gquiz.back() : 30

gquiz.pop() : 20 30