The following code opens the file “data.txt” and prints its data on the screen.

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| #include <iostream>  #include <fstream>  #include <string>  using namespace std;  int main () {  int i;  ifstream myfile ("data.txt");  if(!myfile.is\_open())  {  cout<<"Error opening file";  return 1;  }  myfile>>i;  while ( !myfile.eof() )  {  cout << i << endl;  myfile>>i;  }  myfile.close();  return 0;  } |

The following code is a modified version of the above code; the following code copies the content of the file “data.txt” to the file “copy.txt”.

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| #include <iostream>  #include <fstream>  #include <string>  using namespace std;  int main () {  int i;  ifstream fin ("data.txt");  if(!fin.is\_open())  {  cout<<"Error opening input file";  return 1;  }    ofstream fout("copy.txt");  if(!fout.is\_open())  {  cout<<"Error opening output file";  return 1;  }    fin>>i;  while ( !fin.eof() )  {  cout << i << endl;  fout<< i <<endl;  fin>>i;  }  fin.close();  fout.close();  return 0;  } |

Lab task:

Make a file “data.txt” with the following data.

The first integer tells the total number of integers in the file

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| 5  12  22  3  5  56 |

Your task is as follows

1. read the first integer into a variable ***n***
2. make a dynamic array of size ***n***
3. Loop ***n*** times and read the ***n*** integers from the file into the array
4. sort the array using bubble sort
5. write the sorted array to a file named “sorted\_data.txt”