1.

map<string, string> myMap;

string s = "LOL";

myMap["LOL"] = "Laugh Out Loud";

myMap["ROTFL"] = "Rolling On The Floor Laughing";

myMap["CUL8R"] = "See You Later";

myMap["LTNS"] = "Long Time NO see";

if (myMap[s] != "")

cout << myMap[s] << endl;

2.

Uploaded.

3.

M = 212

N = -371

N = 212

M = 371

N = 212

M = 371

M = 159

N = 212

M = 53

N = 159

M = 106

N = 53

M = 53

N = 106

M = 53

N = 53

GCD returned 53

4.

int sum(const vector<double>& x, int lo, int hi)

{

mySum = (mySum + x[lo] + x[hi]);

lo = lo + 1;

hi = hi - 1;

if (lo > hi)

return mySum;

else if (lo < hi)

sum(x, lo, hi);

else

{

mySum = mySum + x[hi];

return mySum;

}

}