

Problem A: Hello, World!

Practice Problem

Problem Background

Welcome to Lockheed Martin Quest™ Academy! This website contains problems very similar to those used in Lockheed Martin's annual Code Quest programming contests. It will be regularly updated with new problems and new resources to help you practice and improve your programming skills.

You've already taken the first step by opening up this problem description; this problem will walk you through the process of creating a solution to a problem and submitting it to our website. If you have any questions about this or any other problem, let us know! The website provides a chat feature that you can use to connect with Lockheed Martin employees who can assist you with solving problems and submitting solutions.

Problem Description

We want you to submit a sample program just to make sure everything is working correctly. Don't worry about writing the code; we give you the answers to this problem!

All problems at Lockheed Martin Quest™ Academy will require you to read input from the standard input channel - usually mapped to your keyboard - and print to the standard output channel - usually mapped to your console. For this practice problem, that's literally all we want you to do; print out whatever input you receive. Again, the provided source code will do just that, but you're welcome to try to write your own solution once you're sure everything is working.

While sample input and output files will be provided to allow you to test your programs on your computers, your programs need to be able to read all input from the standard input channel, and print it to the standard output channel (the console). IDEs such as Eclipse and NetBeans can be configured to feed the contents of these files into your program's standard input. If you run your programs from the command line (in Windows, Mac, or Linux), you can pass the file's content into standard input like so, assuming the source and input files are in the current directory:

```
{command to compile your program}  
{command to run your program} < {input file}
```

Example for C++:

```
g++ -o Prob05.exe Prob05.cpp  
Prob05.exe < Prob05.in.txt
```

Example for Java:

```
javac HelloWorld.java  
java HelloWorld < HelloWorld.in.txt
```

Also, keep in mind that the input and output files we provide you with aren't the only files your program will be run against. We keep hidden sets of input and output for each problem; your program must produce the correct output for each set. After all, it wouldn't be a challenge if we gave you *all* the answers, now would it?

If you run into any problems now or elsewhere during your work on this website, please contact us through the chat page, and a Lockheed Martin employee will be happy to help you out. We'd also recommend you try your hand at solving Problem B for additional practice.

Good luck, and happy coding!

Sample Input

The first line of your program's input, received from the standard input channel, will contain a positive integer representing the number of test cases. Each test case will include a single line of text to be reprinted to the standard output channel.

```
2  
Welcome to Code Quest!  
Good luck today!
```

Sample Output

For each test case, your program must output the provided input line, unchanged.

```
Welcome to Code Quest!  
Good luck today!
```

Solution Code

The solution code for each language, and specific details for working with each language, are provided below. We strongly recommend using this code as a template for solving all other problems at Lockheed Martin Quest™ Academy. When submitting solutions, submit the source code only (e.g. .java, .cpp, .vb, .cs, or .py files); do not submit executable files (e.g. .exe files) or compiled code (e.g. .class files).

We also strongly recommend that your source code does not contain any personally identifying information, like names or email addresses, for your own security. See our Privacy Policy for more information.

Java

We support Java 8. The use of 'package' statements is unnecessary, but will not cause compilation errors.

```
import java.util.Scanner;

public class Prob00 {
    public static void main(String[] args) {
        try (Scanner input = new Scanner(System.in)){
            int testCases = Integer.parseInt(input.nextLine());

            for(int testcase = 0; testcase < testCases; testcase++) {
                System.out.println(input.nextLine());
            }
        }
    }
}
```

Python

We support Python 3.

```
# Recommended imports for all problems
# Some problems may require more
import sys
import math
import string

cases = int(sys.stdin.readline().rstrip())
for caseNum in range(cases):
    print(sys.stdin.readline().rstrip())
```

C#

We support .NET version 4.6 and C# version 6.0.

```
using System;

class CodeQuest {
    static void Main(string[] args) {
        int numTestCases = Convert.ToInt32(Console.ReadLine());

        for(int testCase = 0; testCase < numTestCases; testCase = testCase + 1){
            string text = Console.ReadLine();
            Console.WriteLine(text);
        }
    }
}
```

C++

We use version 7.3.0 of the g++ compiler.

```
// Recommended includes for all problems. Some problems require additional libraries.
#include <iostream>
#include <string>
#include <cmath>
#include <cstdlib>
using namespace std;
```

```
int main()
{
    int testCases;
    cin >> testCases;
    string dummy;
    getline(cin, dummy);

    for(int testcase = 0; testcase < testCases; testcase++){
        string text;
        getline(cin, text);
        cout << text << '\n';
    }
}
```

VB.NET

We support .NET version 4.6 and Visual Basic 8.

Option Explicit On

Module HelloWorld

```
Sub Main(args As String())
    Dim i As Integer
    Int32.TryParse(Console.ReadLine(), i)
    Dim test As Integer = 0
    For test = 0 To (i - 1)
        Console.WriteLine(Console.ReadLine())
    Next
End Sub
```

End Module

Other Languages

We don't support any other programming languages at this time, but we are always keeping an eye on current trends within the software engineering industry and school curriculums. If you'd like to be able to work in another programming language, let us know!