

Problem A: Hello, World!

Points: 0 (This is a practice problem)

Problem Background

Welcome to Code Quest Academy! We're excited to have you join us. Good luck!

Before you start working on more difficult problems, we want to introduce you to how our problems work and how to get them submitted to the website. This practice problem gives you everything you need to solve it; you don't have to write a solution yourself! Just follow the instructions here, and you'll have taken the first step on your programming Quest.

Problem Description

All Code Quest Academy problems expect you to write a program to read a particular set of input and print a particular output. For this problem, we'll give you a number representing the number of lines in the input, and you simply need to reprint those lines.

While sample input and output files are provided to allow you to test your programs on your computer, 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 ProbA.exe ProbA.cpp  
ProbA.exe < ProbA.in.txt
```

Example for Java:

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

For this sample problem, all we want you to do is 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. To submit a solution, find your preferred language below and copy that solution text into a file. Name the file according to your language's conventions, and save it somewhere it can be easily found:

- Java: HelloWorld.java
- Python: HelloWorld.py
- C++: HelloWorld.cpp
- C#: HelloWorld.cs

Now go back into the Code Quest Academy website and click on the “Hello World” problem, if you’re not already there. Click the “Submit Your Solution” button; if you don’t see it, refresh the page to make sure you’re logged in. After clicking the button, select the file you created above. If you’ve named it correctly, the website should automatically select the correct language. Then, click “Upload Solution!”

After a few moments, refresh the page. You should see a result shown above the problem description. If it says “Solved,” congratulations! If you get any other result, something went wrong; click on the result for more details as to what might have happened.

An important thing to remember for all problems is that your solution will be run **twice**; once using the sample inputs and outputs we provide to you, and once using a MUCH larger hidden set of input. It’s very possible that your solutions will work as expected when using the sample inputs, but still provide a wrong answer when using the hidden inputs. Always carefully review every problem to ensure you’re taking every potential scenario into account.

If you need help with any problems on Code Quest Academy, reach out to us at code-quest-academy.gr-eo@lmco.com. We’d also recommend you try your hand at solving “Not So Self-Driving” for additional practice. Good luck!

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 on the website**; just adapt the contents of the ‘for’ loop in each solution to address the problem you’re

solving. 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).

For all languages, we only support the libraries and features that come with a basic installation of the programming language. Third-party libraries are generally not supported, and will result in “compiler error” results. Any attempt to read to or write from files or an network connection will result in a runtime error.

Java

Code Quest Academy uses OpenJDK 17.0.12. If your main() method is defined in a public class, make sure that your file name matches the class name (e.g. `public class Test` in `Test.java`) or you WILL get a “compiler-error” result. Removing the `public` modifier from the class (as shown below) will avoid this restriction.

```
import java.util.Scanner;

class HelloWorld {
    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

Code Quest Academy supports Python 3.9.16.

```
# 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#

Code Quest Academy uses version 6.8.0.105 of the Mono C# compiler; more details on specific support are available at <https://www.mono-project.com/docs/about-mono/languages/csharp/>.

```

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++

Code Quest Academy uses version 12.2.0 of the g++ compiler.

```

#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';
    }
}

```