# **Basic Data Types**



#### **Problem Statement**

C++ has the following data types. Below we give you their format specifier, and their most common bit width:

- Int ("%d"): 32 Bit integer
- Long ("%ld"): 32 bit integer (same as Int for modern systems)
- Long Long ("%lld"): 64 bit integer
- Char ("%c"): Character type
- Float ("%f"): 32 bit real value
- Double ("%lf"): 64 bit real value

#### Reading

In order to read a data type, you need the following syntax:

```
scanf("`format_specifier`", &val)
```

For example, in order to read a character and then a double:

```
char ch;
double d;
scanf("%c %lf", &ch, &d);
```

For the moment, we can ignore the spacing between format specifiers.

#### **Printing**

In order to print a data type, you need the following syntax:

```
printf("`format_specifier`", val)
```

For example, in order to print a character and then a double:

```
char ch = 'd';
double d = 234.432;
printf("%c %lf", ch, d);
```

**Note:** You can always use *cin* and *cout* instead of *scanf* and *printf*. However, if you are taking a million numbers as input and printing a million lines, it is faster to use *scanf* and *printf*.

#### **Input Format**

Input will consist of an int, long, long long, char, float and double, each separated by a space.

#### **Output Format**

Print each of the elements on a new line in the same order.

### **Sample Input**

3 444 12345678912345 a 334.23 14049.30493

## **Sample Output**

3 444 12345678912345 a 334.23 14049.30493