

# C Programming

## Tutorial 1

1. If you have a `float` variable set to 3.1, what would be the output of `printf`? Why?

2. If you have two `float` variables, say, `a` and `b`, how would you check if `a` equals `b` (floating-point equality)?

3. How would you round numbers (e.g., you are going to round a float variable: `x`)?

4. Is the following code problematic? Or, what would be the value of `i`?

```
int i = 3;
i = i++;
```

5. Would the following code work?

```
int a = 10000, b = 10000;
long int c = a * b;
```

6. See the code below. What is the value of a?

```
double a, b = 32.5;  
a = 2 / 5 * (b - 30);
```

7. Would the following code work?

```
long int n = 1000000;  
printf("%d\n", n);
```

8. Any problems with the following code?

```
int i;  
scanf("%d", i);
```

or

```
char s[10];  
scanf("%s", s);
```

9. Would the following code work?

```
double d;  
scanf("%f", &d);
```

10. Would the following code work?

```
short int s;  
scanf("%d", &s);
```