C Programming

Tutorial 2

1. What are the types used by main()?

2. switch statement vs if/else chain. Which one do you use and why?

3. What does the following declaration mean?

```
int* p1, p2;
```

4. We have the following code:
   ```
   int a = 1, b = 2, c = 11, d = 22;
   f(...); /* pass appropriate actual parameters */
   ```

   Implement function f which will change a's value to c's value (11) and b's value to d's value (22).

5. What's the difference between const char *p, char const *p, and char * const p?

6. int f1(const int *p1) vs int f2(const int p2). Do you really need const here?

7. int a[10] = {0, 1, 2, …, 8, 9}; What is the output of sizeof(a)? Is a treated as a pointer?

8. NULL pointer vs. uninitialised pointer. What is the difference between the two?

9. See the following code. What is the value of m?

```
int *p, m, n = 10;

p = &n;

m = *p++;
```

10. See the following code. Function f is supposed to initialise pointer p. Can you implement function f to initialise p with a NULL pointer?

```
int *p;

f(p); /* is this going to work? */
```