1- What is the expected output?

```
// www.gammal.tech
#include<stdio.h>
int main() {
   int x, y;
   printf("%d %d", x, y);
   return 0;
}
```

Solution

```
// www.gammal.tech

Mistake: Variables x and y are uninitialized, leading to undefined behavior. They may contain garbage values.
```

2- What is the expected output?

```
// www.gammal.tech
#include<stdio.h>
int main() {
   int result = 5 / 2;
   printf("%d", result);
   return 0;
}
```

2

3- What is the expected output?

```
// www.gammal.tech
#include<stdio.h>
int main() {
   int result = 5 / 2;
   printf("%d", result);
   return 0;
}
```

Solution

5 A

4- What is the expected output?

```
// www.gammal.tech
#include<stdio.h>
int main() {
   int i;
   for (; i <= 5; i++) {
      printf("%d\n", i);
   }
   return 0;
}</pre>
```

Solution

```
// www.gammal.tech

Variable i is uninitialized, leading to unpredictable behavior in the loop. It should be initialized to 0.
```

5- What is the expected output?

```
// www.gammal.tech
#include<stdio.h>

void myFunction() {
   int x = 10;
}

int main() {
   printf("%d", x); // Scope issue
   return 0;
}
```

Solution

```
// www.gammal.tech
Variable x is declared in the scope of myFunction, and it's not accessible in main.
```

6- What is the expected output?

```
// www.gammal.tech
#include<stdio.h>
int main() {
   int x = 5;
   int y = 10;
   if (x > y);
   {
      printf("x is greater than y\n");
   }
   return 0;
}
```

Solution

```
x is greater than y
```

7- What is the expected output?

```
// www.gammal.tech
#include<stdio.h>
int main() {
   int x = 5;
   if (x = 10) {
      printf("x is equal to 10\n");
   }
   return 0;
}
```

Solution

```
x is equal to 10
```

Explanation

```
// www.gammal.tech
Using the assignment operator (=) instead of the equality operator (==) in the if statement.
```

8- What is the expected output?

```
// www.gammal.tech

#include<stdio.h>

int main() {
    printf("Hello\n");
    return 0;
    printf("This code is unreachable\n");
}
```

Output

```
Hello
```

Explanation

```
// www.gammal.tech
The code after return 0; is unreachable, as the function has already returned.
```

9- What is the expected output?

```
// www.gammal.tech
#include<stdio.h>
int main() {
    char str1[] = "Hello";
    char str2[] = "World";

    if (str1 == str2) {
        printf("Strings are equal\n");
    } else {
        printf("Strings are not equal\n");
    }

    return 0;
}
```

Solution

```
Strings are not equal
```

10- What is the expected output?

```
// www.gammal.tech
#include<stdio.h>
int main() {
   int arr[-5]; // Incorrect array declaration with negative size
   printf("Array created successfully\n");
   return 0;
}
```

Solution

```
// www.gammal.tech
Declaring an array with a negative size, which is not allowed.
```