Quiz 1

1) If a picture is made up of 30 possible colors, how many bits would be needed to store each pixel of the picture? Why?

2) What gets printed by the following program?

```java
// Guess what this does
public class Quiz1
{
    public static void main(String args[])
    {
        int x = 1;
        String mood = "happy";

        // "imho Quiz 1 is easy"
        // printing: "character strings go in double quotes"
        // watch out for print vs. println!

        System.out.println("Welcome to our first quiz");
        System.out.print("The value of x is " + x);
        System.out.println(" For some reason this makes me " + mood);
    }
}
```

Output

3) Which of the following are valid Java identifiers?

- ANSWER
- result
- public
- x12345y
- black&white
Quiz 1

1) How many unique items can be represented using 4 bits?

2) What gets printed by the following program?

```java
// Guess what this does
public class Quiz1
{
    public static void main(String args[])
    {
        int x = 1;
        String mood = "happy";

        // "imho Quiz 1 is easy"
        // printing: "character strings go in double quotes"
        // watch out for print vs. println!

        System.out.println(" This is our first quiz");
        System.out.print(" Next week quiz " + (x + 1));
        System.out.println(" For some reason this makes me " + mood);
    }
}
```

Output

3) Categorize each of the following errors as leading to a compile-time error, run-time error, or possibly a logical error.

- Forget to put a blank to separate words, eg:
  ```java
  System.out.println ("this" + "and" + "that");
  ```

- Forget the semicolon at the end of one of the statements

- Type `system.out.println()` instead of `System.out.println()` (error in capitalization).

- Type “man” instead of “main”
Quiz 1

1) List all possible binary codes that you can make using just two bits.

2) What gets printed by the following program?

```java
// Guess what this does
public class Quiz1 {
    public static void main(String args[]) {
        int x = 1;
        String mood = "happy";

        // "imho Quiz 1 is easy"
        // printing: "character strings go in double quotes"
        // watch out for print vs. println!
        System.out.println( "Welcome to our first quiz");
        System.out.print( "The value of x is " + x);
        System.out.println( " For some reason this makes me " + mood);
    }
}
```

Output

3) Which of the following are valid Java identifiers?
   - ANSWER
   - result
   - public
   - x12345y
   - black&white
Quiz 1

1) How many unique items can be represented using 3 bits?

2) What gets printed by the following program?

```java
// Guess what this does
public class Quiz1 {
    public static void main(String args[]) {
        int x = 1;
        String mood = "happy";

        // "imho Quiz 1 is easy"
        // printing: "character strings go in double quotes"
        // watch out for print vs. println!
        System.out.println("This is our first quiz");
        System.out.print("Next week quiz " + (x + 1));
        System.out.println("For some reason this makes me " + mood);
    }
}
```

Output

3) Categorize each of the following errors as leading to a compile-time error, run-time error, or possibly a logical error.

- Forget to put a blank to separate words, eg:
  ```java
  System.out.println ("this" + "and" + "that");
  ```

- Forget the semicolon at the end of one of the statements

- Type `system.out.println()` instead of `System.out.println()` (error in capitalization).

- Type “man” instead of “main”