Answers 1

1. What differences have you noticed between Java and Python so far?

   Use your own words. Feel free to use the internet to search.

Possible answers:

- Java tends to be more wordy than Python.
- Java is a "compiled language", Python is an "interpreted language".
- Both Java and Python have modern-day uses.

2. In Java, write a program that asks for the user's name, then repeats their name back to them.

```java
1    import java.util.Scanner;
2
3    public class Main {
4        public static void main(String[] args) {
5            Scanner scan = new Scanner(System.in);
6
7            System.out.print("Enter your name: ");
8            String name = scan.nextLine();
9            System.out.println("Your name is: " + name);
10
11           scan.close();
12       }
13   }
```

3. Rewrite the program described above in Python.

```python
1    name = input("Enter your name: ")
2    print("Your name is:", name)
```

4. Identify the error in the following program and how to fix it.

The variable `pizzasCount` is of type `String`, but is being treated as a type `int` in the program.

```java
1    String pizzasCount = scan.nextLine(); // Incorrect
```

```java
1    int pizzasCount = scan.nextInt(); // Correct
```

5. Identify the three problems in the following line of 🍵 code:

```java
1    string thisIsAString! = "hi"
```

1. `string` should be capitalized → `String`
2. The variable name `thisIsAString!` is invalid because it ends with `!`.
3. There is a missing semicolon after `"hi"`. Corrected:

```java
1    String thisIsAString = "hi";
```

6. Identify why the following program won't run.

Notice that the main function is called "notmain".

```java
1    public static void notmain(String[] args) { ...
```

It should actually be called "main".

```java
1    public static void main(String[] args) { ...
```

7. In Java and Python, define a variable for each of the following types with your choice of data

   a) int b) String c) double d) char e) boolean

Possible answers (Java):

a) `int num = 2;`
b) `String someString = "some text";`
c) `double pi = 3.14159;`
d) `char someCharacter = 'Y';`
e) `boolean isBool = true;`

Possible answers (Python):

a) `num = 2`
b) `some_string = "some text"`
c) `pi = 3.14159`
d) `some_char = 'Y'`
e) `is_bool = True`