## **Basic Programming:**

1. Data type usually used in arithmetic operation are integer and floating-point.

The integer types are byte, short, int, long, and char.

The floating-point are float and double.

- 2. Data type usually used in word and character are char and String.
- 3. The answer is 113

```
1  public class area{
2     public static void main(String []args){
3         int a = 100 + 3*5 - 10/5;
4         System.out.println(a);
5     }
6 }

$ javac area.java

$ java - Xmx128M - Xms16M area

113
```

4. The answer is 2

5. The answer is 3566GoldenStreetMiami

## Flaky Test:

- A flaky test is a test that fails to produce the same result each time the same test case is run, in Bahasa we called this "Labil Test", sometimes the test will be failed, sometimes the test will be success.
- 2. To test Asynchronous JavaScript (AJAX), we used Testing Asynchronous Code using Jest. Example:

```
test('the data is Vans is running away from Pokemon, async () => {
   await expect(fetchData()).resolves.toBe('Vans is running away from
   Pokemon');
});
```

Using Jest, we can know when the code it is testing has completed, from the example above, we want to test the returned data is the string 'Vans is running away from Pokemon', if the returned data is correct means that the test is success.

```
test('the fetch fails with an error', async () => {
  await expect(fetchData()).rejects.toThrow('System Error');
});
```

If the returned data is false, we can test it using the example above, we are checking the returned data is false, means that the test is failed.

3. To test a website page that can only be accessed with CAPTCHA, I think we used manual testing to test the CAPTCHA first, after that we can used manual or automation testing for the next step of test case.