Lab 11 – Java API and Classes Libraries

Part A: Exercise

1. **Write a program that sum up 100 random values that stored in a double-type of array.**

2. **Write a program that ask user to enter a number between 0 and 127. The program should convert the number to a character based on ASCII table.**

3. **Write a program that allow user to enter two sentences. The program should print out different types of sentence using methods from String and StringBuffer as below:**

```
First sentence: I am June
Second sentence: I like to travel
Full sentence: I am June and I like to travel
Lowercase: i am june and i like to travel
Uppercase: I AM JUNE AND I LIKE TO TRAVEL
No space: IamJuneandIliketotravel
Snake case: I_am_June_and_I_like_to_travel
From index 7 to 18: ne and I li
Reverse case: levart ot ekil I dna enuJ ma I
```

4. **Write a program to find the first and last occurrence of the character 'a' in the sentence of "Mary had a little lamb".**

```
Mary had a little lamb
First occurrence of a is at: 1
Last occurrence of a is at: 19
```

5. **Write a program to allow user to enter 10 types of fruit. The program should display the fruits in ascending order.**