

Assignment1

Student name: Wenhao Lu

Student number:S3810097

Class number:COOSC1284

Program error:

-When program asks user to input the the number of tool

```
Scanner scanner = new Scanner(System.in); //Creates an object of Scanner
int userInput = scanner.nextInt();
```

If user type any letters or punctuation, it will cause the program to crash

```
1.Unit Converter
2.Lotto
Please type a number of option:
ds
Exception in thread "main" java.util.InputMismatchException
    at java.base/java.util.Scanner.throwFor(Scanner.java:939)
    at java.base/java.util.Scanner.next(Scanner.java:1594)
    at java.base/java.util.Scanner.nextInt(Scanner.java:2258)
    at java.base/java.util.Scanner.nextInt(Scanner.java:2212)
    at A1.run(A1.java:17)
    at Driver.main(Driver.java:4)
AsherdeMBP:COOSC1284 Assignment1 asher$
```

Improvement

For some part of code, it looks like redundant and repeated because we can only use “if else” or “switch”, if we can use loop, it will make our code more efficient and shorter.

```
int randomNumber;
int[] lottery = new int[8];
randomNumber = (int) (Math.random() * 48 + 1);
lottery[0] = randomNumber;
randomNumber = (int) (Math.random() * 48 + 1);
lottery[1] = randomNumber;
randomNumber = (int) (Math.random() * 48 + 1);
lottery[2] = randomNumber;
randomNumber = (int) (Math.random() * 48 + 1);
lottery[3] = randomNumber;
```

```
randomNumber = (int) (Math.random() * 48 + 1);  
lottery[4] = randomNumber;  
randomNumber = (int) (Math.random() * 48 + 1);  
lottery[5] = randomNumber;  
randomNumber = (int) (Math.random() * 48 + 1);  
lottery[6] = randomNumber;  
randomNumber = (int) (Math.random() * 48 + 1);  
lottery[7] = randomNumber;
```