Error Log Chapter 9

Exercise 1

Error 1:
1:
No error message

2:

```
Even--------------
6 16 22 88 6 32 70 80 6 46 98 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Odd--------------
95 11 49 29 53 85 5 53 91 19 93 29 27 29 0 0 0 0 0 0 0 0 0 0 0
```

There are 0's when printing each number in the array

3:
Logic error

4:

```
int[] even = new int[25];
int[] odd = new int[25];
```

5:
Made the array fit the amount of numbers so there are no extra 0's at the end

6:

```
int x = 0;
int y = 0;

for (int i = 0; i < numlist.length; i++) {
    if (numlist[i] % 2 == 0) {
        x++;
    } else {
        y++;
    }
}
int[] even = new int[x];
int[] odd = new int[y];
```

Error 2:

1:

No error message

2:

The code prints 26 numbers, not 0-<mark>25</mark> numbers

3:

Logic error

4:

```java
public static void main(String[] args) {
    int[] numlist = new int[26];
```

5:

0-25 is the index of size 26 but 0-24 holds 25 numbers, so I switched it to 25

6:

```java
public static void main(String[] args) {
    int[] numlist = new int[25];
```

Exercise 8

Error 1:

1:

```
Palindrome tester, enter your text: Evil is a name of a foeman as I live
ERROR!
Exception in thread "main" java.lang.ArrayIndexOutOfBoundsException: Index 20 out of bounds for
    length 20
    at Main.main(Main.java:21)
```

2:

The longer palindromes didn't run

3:

Logic error

4:

```
System.out.print("Palindrome tester, enter your text: ");
String paltest = s.nextLine();

char[] array = new char[20];
char[] array2 = new char[20];
```

5:
Made the length of the array the size of the input instead of a set amount

6:
```
System.out.print("Palindrome tester, enter your text: ");
String paltest = s.nextLine();

char[] array = new char[paltest.length()];
char[] array2 = new char[paltest.length()];
```

Error 2:
1:
```
Palindrome tester, enter your text: racecar
ERROR!
Exception in thread "main" java.lang.StringIndexOutOfBoundsException: Index 7 out of bounds for
    length 7
    at java.base/jdk.internal.util.Preconditions$1.apply(Preconditions.java:55)
    at java.base/jdk.internal.util.Preconditions$1.apply(Preconditions.java:52)
    at java.base/jdk.internal.util.Preconditions$4.apply(Preconditions.java:213)
    at java.base/jdk.internal.util.Preconditions$4.apply(Preconditions.java:210)
    at java.base/jdk.internal.util.Preconditions.outOfBounds(Preconditions.java:98)
    at java.base/jdk.internal.util.Preconditions.outOfBoundsCheckIndex(Preconditions.java:106)
    at java.base/jdk.internal.util.Preconditions.checkIndex(Preconditions.java:302)
    at java.base/java.lang.String.checkIndex(String.java:4832)
    at java.base/java.lang.StringLatin1.charAt(StringLatin1.java:46)
    at java.base/java.lang.String.charAt(String.java:1555)
    at Main.main(Main.java:19)
```

2:
Index was out of bounds

3:
Logic error

4:

```
18 ▾            for (int i = paltest.length() - 1; i >= 0; i++) {
19                  char l = paltest.charAt(i);
20 ▾                if (l != ' ') {
21                      array[x] = paltest.charAt(i);
22                      x+=1;
23                  }
24              }
```

5:
Made i++ into i-- so it will go backwards from the end of the array and not at the end of the array go out of bounds

6:
```
18 ▾            for (int i = paltest.length() - 1; i >= 0; i--) {
19                  char l = paltest.charAt(i);
20 ▾                if (l != ' ') {
21                      array[x] = paltest.charAt(i);
22                      x+=1;
23                  }
24              }
```

Error 3:
1:
No error message

2:
```
Palindrome tester, enter your text: racecar
Isn't a palindrome
```

Stated a palindrome as not a palindrome

3:
Incorrect function usage

4:

```java
if (array == array2) {
    System.out.println("Is a palindrome");
} else {
    System.out.println("Isn't a palindrome");
}
```

5:
Made each index of the arrays compare to each other instead of directly comparing the arrays

6:
```java
for (int i = 0; i < paltest.length(); i++) {
    if (array[i] != (array2[i])) {
        not++;
    }
    i++;
}


if (not == 0) {
    System.out.println("Is a palindrome");
} else {
    System.out.println("Isn't a palindrome");
}
```