FUNCTIONS SOLUTIONS

Solution 1:

```
import java.util.Scanner;
public class Solution {
public static void main(String[] args) {
       Scanner sc = new Scanner(System.in);
       System.out.print("Input the first number: ");
       double x = sc.nextDouble();
       System.out.print("Input the second number: ");
       double y = sc.nextDouble();
       System.out.print("Input the third number: ");
       double z = sc.nextDouble();
       System.out.print("The average value is " + average(x, y, z)+"\n" );
   }

 public static double average(double x, double y, double z) {
       return (x + y + z) / 3;
   }
}
```

Solution 2:

```
import java.util.*;

public class Solution {
   public static void main(String[] args) {
       Scanner sc = new Scanner(System.in);
       int num;

       System.out.print("Enter an integer: ");
       num = sc.nextInt();

       if(isEven(num)) {
           System.out.println("Number is even");
       } else {
           System.out.println("Number is odd");
```

```
        }
    }

    public static boolean isEven(int number) {
        if(number % 2 == 0) {
            return true;
        }
        else {
            return false;
        }
    }
}
```

Solution 3:

```
import java.util.Scanner;

public class Solution {
    public static void main(String args[]) {
        System.out.println("Please Enter a number : ");
        Scanner sc = new Scanner(System.in);
        int palindrome = sc.nextInt();

        if(isPalindrome(palindrome)) {
            System.out.println("Number : " + palindrome + " is a palindrome");
        } else {
            System.out.println("Number : " + palindrome + " is not a palindrome");
        }

    }
    public static boolean isPalindrome(int number) {
        int palindrome = number; // copied number into variable
        int reverse = 0;

        while (palindrome != 0) {
            int remainder = palindrome % 10;
            reverse = reverse * 10 + remainder;
            palindrome = palindrome / 10;
        }
```

```
        // if original and the reverse of number is equal means
        // number is palindrome in Java
        if (number == reverse) {
            return true;
        }
        return false;
    }
}
```

Solution 4: This is a DIY question & should be solved on your own.

Solution 5:

```
import java.util.Scanner;
public class Solution {
 public static void main(String[] args) {
     Scanner sc = new Scanner(System.in);
     System.out.print("Input an integer: ");
     int digits = sc.nextInt();
     System.out.println("The sum is " + sumDigits(digits));
    }

public static int sumDigits(int n) {
        int sumOfDigits = 0;
        while(n > 0) {
            int lastDigit = n % 10;
            sumOfDigits += lastDigit;
            n /= 10;
        }

        return sumOfDigits;
    }
}
```