North South University
Department of Electrical and Computer Engineering
CSE 215L: Programming Language II Lab
Lab Manual - 5
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Objective:

- To use method overloading and understand ambiguous overloading
- Overload a method by changing the definition of parameters
- Overload a method by changing the definition of return type

Method Overloading

The syntax for defining a method overloading by varying the parameter is a follow:

```
class MethodOverloading{
      static int add(int a,int b){
            return a+b;
      }
      static int add(int a,int b,int c){
            return a+b+c;
      }

      public static void main(String[] args){
            System.out.println(add(11,11));
            System.out.println(add(11,11,11));
      }
}
```

The syntax for defining a method overloading by varying the return type is a follow:

```
class MethodOverloading {
      static int add(int a, int b){
            return a+b;
      }
      static double add(double a, double b){
            return a+b;
      }

      public static void main(String[] args){
            System.out.println(add(11,11));
            System.out.println(add(12.3,12.6));
      }
}
```

Task – 1

(*Print Sequentially*) Create two methods having the same name but different sequence of the integer and the character parameters to print an integer and a character.
For example, if the parameters of the first method are of the **form (int n, char c)**, then that of the second method will be of the **form (char c, int n)**.

Task – 2

(*Area Calculation*) Create two methods with the same name but different number of parameters to print the area of a square and a rectangle. The method for printing area of rectangle has two parameters which are length and breadth, respectively while the other method for printing area of square has one parameter which is side of square. Using method chaining instead of similar formula.

Homework – 1

(*Palindrome*) Write the methods with similar name to check palindrome. Argument can be string or number

A number or string is a palindrome if its reversal is the same as itself. Write a test program that prompts the user to enter an string or number and reports whether it is a palindrome.

Homework – 2

(*Conversion*) Write the methods with similar name "Convert" to generate string value of a number or vice versa