#### DIPLOMA SEM 5 – JAVA PROGRAMMING EXTRA PROGRAMS

# **Programming in JAVA**

### **Tutorial: 1 (1 to 10)**

- 1) \*Write a program that display the following message in the command prompt: (God said: "how are you?")
- 2) Write a program that prints features of Java.
- 3) Write a program that calculate the area of the circle.
- 4) \*Write a program that swap the two values with using third variable and without using third variable.
- 5) \*Write a program that takes two byte variable each having the initial value & take third variable. Assign the result of addition of two byte variable into third one.
- 6) Write a program that calculates the Simple Interest. (p\*r\*n/100)
- 7) \*Write a program that check whether the number is even or odd.
- 8)\* Write an application that creates a two-dimension array with float values.
  - a. The first element should be array containing -56.7f.
  - b. The second element should be an array containing 500.1f and 70.70f.
  - c. Third element should be an array containing 100.9f,0.5f,20.20f.
  - Declare, allocate and initialize the array. Display its length and elements.

### **Tutorial:2**

- 1) Write a program that take initial values of students Roll Number, Name, and total marks secured in 5 subjects print his/her result as follows:
  - a. If percentage >= 70 then result = "Distinction"
  - b. If percentage >= 60 and < 70 then result = "First Class"
  - c. If percentage >= 50 and < 60 then result = "Second Class"
  - d. If percentage >= 40 and < 50 then result = "Pass Class"
  - e. Else result = "Fail".
- 2) Write a java application program to display factorial of any number.
- 3) Write a program that initialize three variables and find maximum among them.
- 4) Write a program that initialize month number and print the name of month (use switch...case) if month number is not in between 1 to 12, program should print invalid month number message.
- 5) Write a program to generate N Fibonacci series with while loop.
- 6) Set 10 integer values in an array; count each number occurrence in the array.

AVPTI-CE 1 | P a g e

#### DIPLOMA SEM 5 – JAVA PROGRAMMING EXTRA PROGRAMS

#### **Tutorial:3**

## **Command line argument**

- 1) To reverse the input number. Number must be entered as command line argument.
- 2) Write a program that displays all the factors of a number entered by the user through keyboard during program execution. E.g. 8=>2 and 4
- 3) Write a java program which accepts any number from command prompt and displays the table of multiplication from 1 to 10 of that number.
- 4) Write a java program that takes integer no. as an input and check whether that no is prime or not.
- 5) Write a java program to take number as command line argument and check whether the number is Armstrong or not.
  - [Armstrong number: The sum of cube of each digit is equal to number]
- 6) Write a java application program to print first N prime numbers; N must be entered as command line argument.
- 7) Write a program that takes string as an input and count number of vowels in that string.
- 8) Write a program that takes String as input from user and display next character at each character.

Ex. Input String :CDE Output String:DEF

- 9) Write an application that search through its command line arguments. if an argument is found that does not begin with an uppercase letter, display an error message and terminate. (Hint: Use the Character.isUpperCase() Method)
- 10) Demonstrate the following methods of the Math class max(),min(),abs(),ceil(),floor(),random().

AVPTI-CE 2 | P a g e