Groovy Exercise

Simple Exercise:

Data Types, Operators:

1. Write a program to display int, float, char, string
2. Write a program to display List and map
3. Length and breadth of a rectangle are 5 and 7 respectively. Write a program to calculate the area and perimeter of the rectangle
4. Write a program to calculate the perimeter of a triangle having sides of length 2,3 and 5 units.
5. Write a program to print the power of 7 raised to 5.
6. Write a program to count the number of characters in string using incremental
7. Write a program for Increment ++ and Decrement -- Operator as Prefix and Postfix
8. Take input of some length in meter and covert it to feet and inches.
9. Write a program to convert Fahrenheit into Celsius.
10. write a program for currency conversion (INR to USD $1= ₹83.16).
11. If the marks of Robert in three subjects are 78,45 and 62 respectively (each out of 100), write a program to calculate his total marks and percentage.

Conditional Statement

1. Write a Groovy program to check whether an integer is positive or negative.
2. Write a program to check whether a number is divisible by 5 and 11 or not
3. Write a Groovy program Take values of the length and breadth of a rectangle check if it is square or not.
4. Write a Groovy program to Take two int values and print greatest among them.
5. Write a Groovy program to check whether a year is leap year or not
6. Write a Groovy program to set the angle in Integer and find its shape
7. Write a Groovy program to uses the weekday number to display the weekday name
8. Write a Groovy program to create Simple Calculator using switch case.
9. Write a Groovy program to check whether a character is VOWEL or CONSONANT
10. A school has following rules for grading system:
    a. Below 25 - F
    b. 25 to 45 - E
    c. 45 to 50 - D
    d. 50 to 60 - C
    e. 60 to 80 - B
    f. Above 80 - A
    write a Groovy program to set a marks and print the corresponding grade.

Groovy **E**xercise

Loops:

1. Write a program to print numbers from 1 to 10.
2. Write a program to calculate the sum of first 10 natural number.
3. Write a program print the multiplication table of that number.
4. Write a program that prompts the set an integer and then outputs the number with the digits reversed. For example, if the input is 12345, the output should be 54321.
5. Write a program to find the factorial value of any number.
6. Write a program to display each character in the string
7. Write a program to display the combination of list

List:

1. Write a Groovy program to sum all the items in a list.
2. Write a Groovy program to multiply the items in a list.
3. Write a Groovy program to get the largest number from a list.
4. Write a Groovy program to get the smallest number from a list.
5. Write a Groovy program to remove duplicates from a list.
6. Write a Groovy program to calculate the difference between the two lists.
7. Write a Groovy program to create a list, add some colours (strings) and print out the collection.
8. Write a Groovy program to insert an element into the list at the first position.
9. Write a Groovy program to copy one array list into another.
10. Write a Groovy program to reverse elements in an array list.

Map:

1. Write a Groovy program to associate the specified value with the specified key in a Map.
2. Write a Groovy program to remove particular key-value pair in map
3. Write a Java program to search for a key in a Map is available or not.
4. Write a Groovy program to count the number of key-value (size) mappings in a map.
5. Write a Groovy program to copy all mappings from the specified map to another map.
6. Write a Groovy program to get the value of a specified key in a map.
7. Write a program to add the two map into a single map

Groovy **E**xercise

Date:

1. Write a groovy program to display the current date
2. Write a groovy program to display the yesterday date
3. Write a groovy program to calculate your age using DOB
4. Write a groovy program to get the dates 10 days before and after today
5. Write a Java program to get a date after 2 weeks
6. Write a groovy program to change the format of the date

Closures:

1. Write a program to display the next number that is greater than 2 in the list using closure (single value)
2. Write a program to display the numbers that is greater than 2 in the list using closure (more than one)
3. Write a program to display the same number multiplication in the list using closure

Range:

1. Write a groovy program to display the specific index of the list
2. Write a groovy program to get the first index of the list without using index number.