CL-1002
Programming Fundamentals
Lab # 3

Objectives:

1. • Exhibit the understanding of pseudocode of repetitive problems.
2. • Exhibit the understanding of drawing Flow Charts of repetitive problems.

Note: Carefully read the following instructions (*Each instruction contains a weightage*)

1. First think about statement problems and then write your logic on Paper.
2. Write pseudocode/Flowchart in handwritten form on **Paper using Pen.**
3. Write **Your Name** and **Roll No** on your Paper/Sheet's all pages.
4. Do not copy from any source otherwise you will be penalized with negative marks.
5. Complete your lab **within given Time Slot**.

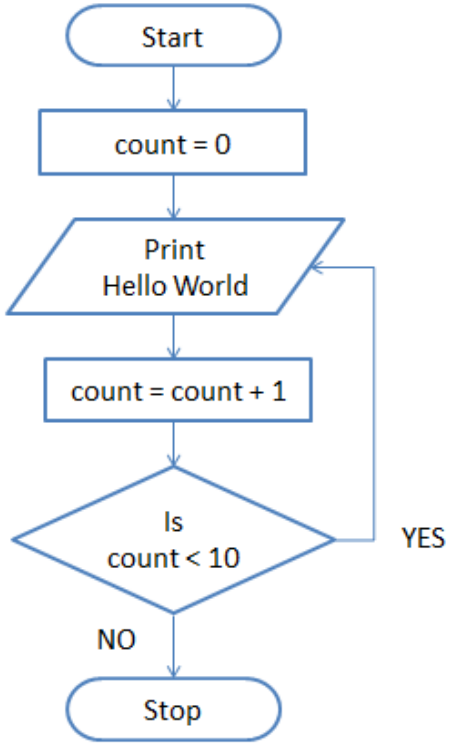
Problem: Write pseudocode of decision-based problems.

Repetition Problems

1. Write pseudocode to print the sum of first 10 integers.
2. Write pseudocode to print all digits of a number entered by user.
3. Write a pseudocode to print first 'n' odd numbers where 'n' is entered by the user.
4. Write pseudocode to print the table of a given number where number is entered by the user.
5. Write pseudocode to multiply two numbers entered by the user using repeated addition.
6. Write pseudocode to print all number in the range of Min-Max where Min and Max are taken as input from the user.
7. Write pseudocode to print all odd number in the range of Min-Max where Min and Max are taken as input from the user.
8. Write a pseudocode to check if a number is Armstrong or not.

Example:

Draw a flow chart of a program that prints "Hello World" for 10 times.



Problem: Draw Flowchart of repetition-based problems.

Repetition Problems

9. Draw flow chart of a program to print the sum of first 10 integers.
10. Draw flow chart of a program to print all digits of a number entered by user.
11. Draw flow chart of a program to print first 'n' odd numbers where 'n' is entered by the user.
12. Draw flow chart of a program to print the table of a given number where number is entered by the user.
13. Draw flow chart of a program to multiply two numbers entered by the user using repeated addition.
14. Draw flow chart of a program to print all number in the range of Min-Max where Min and Max are taken as input from the user.
15. Draw flow chart of a program to print all odd number in the range of Min-Max where Min and Max are taken as input from the user.
16. Draw flow chart of a program to check if a number is Armstrong or not.

Problem: Draw Flowchart of decision-based problems.

Decision Problems

17. Draw flow chart of a program that takes input 1-7 and based on input it should print the day of the week. '1' being Saturday and '7' being Friday. If user enters any other input, program must show an error message.

18. Draw flow chart of a program that takes input 1-12 and based on input it should print the number of days in the month. '1' being January and '12' being December. If user enters any other input, program must show an error message.

Problem: Write pseudo code of following decision-based problems.

Decision Problems

19. Write pseudo code of a program that takes input 1-7 and based on input it should print the day of the week. '1' being Saturday and '7' being Friday. If user enters any other input, program must show an error message.

20. Write pseudo code of a program that takes input 1-12 and based on input it should print the number of days in the month. '1' being January and '12' being December. If user enters any other input, program must show an error message.

Best of Luck ☺

You need to done with your exercise within given time.