Refresher Course on

Data Science

Assignment: 3

```
# User input in R Programming Language
user_input = readline(prompt = "Enter an integer: ")
# Convert the input to an integer
user integer = as.integer(user input)
```

- 1. Write a program to read Celsius temperature and print equivalent Fahrenheit temperate on screen using R.
- 2. Read radius of the circle from user and find the area and perimeter of it using R.
- 3. Read the amount and percentage of interest from the keyboard and find final amount after adding interest in original amount using R.
- 4. Write a program to read distance value in meters and convert it into centimeters, inches, and yards using R.
- 5. Write a Python program to calculate profit or loss. Input is selling cost and actual cost of a product using R.
- 6. Write a program to input basic salary and find output of gross salary using following:

DA = 75% of basic HRA = 20% of basic

Conditions:

Basic < 10000 : gross = da + basic

Basic >= 10000 and < 20000 : gross = da + basic + 50% of hra

Basic >= 20000 : gross = basic + da + hra

Sample: Input and Output 5000: 3750 + 5000 = 8750

12000 : 9000 + 12000 + 1200 = 22200 24000 : 18000 + 24000 + 4800 = 46800

7. Write a program to read a number from user and find the factorial of the number using R.

Example: Factorial for $5 = 5 \times 4 \times 3 \times 2 \times 1 = 120$

- 8. Write a program to read num1 and num2 from keyboard and find addition of all number between that range using R.
- 9. Write a program to read a number from user. Create and use a user defined function to check whether it is odd or even using R?