R PROGRAMING

1. **COMMENTS**: #
2. **VARIABLE CREATING AND SYNTAX** :
   - Variable names should start with alphabets and should only contain alphabets,numbers,underscore(_) or period(.)
   - Variable names are case sensitive
   - In R programming there is no code for declaration of variable
   - When you assign value to it, automatically a variable is created
3. **DATA TYPES** in R programming : There are 5 types of Datatypes in R programming
   - Numeric Type (eg: num=10.2): any decimal / non decimal number
   - Integer Type(eg: num = 345L): any non decimal number
   - Complex Type(eg: num=2+3i): complex number
   - Character Type: (eg:name="KIA")
   - logical(eg:is_valid=TRUE)
4. **NUMBERS** in R Programming
   - Numeric
   - Integer
   - Complex
5. **TYPE CONVERSION**
   - as.numerical()
   - as.integer()
   - as.complex()
6. **BUILT IN FUNCTION** : **MATHS**
   - max()
   - min()
   - sqrt()
   - abs()
   - ceiling()
   - floor()
7. **BUILT IN FUNCTION: STR**
   - nchar()
   - grepl()
   - cat()
   - paste()
8. **BUILT IN FUNCTION : GENERAL**
   - print() : To print the values
   - class(): Data type of variable
9. **IF Statement,IF-ELSE Statement,ELSE-IF Ladder**

- Syntax :
  ```
  If (condition) {
          Block of code
  }else if(condition) {
          Block of code
  }else {
  Block of code
  }
  ```

10. WHILE Loop and FOR Loop

- while(condition){
  ```
          Block of code
  }
  ```
- For (x in iter){
  ```
          Block of code
  }
  ```

11. FUNCTION

- Syntax:
  ```
  Function_name <- function() {
          Block of code
  }
  ```