2a) Explain different data types in R programming with suitable example

Ans) R programming has a number of different data types that are used to store and manipulate data. Some of the most commonly used data types in R are

1. Numeric
2. logical
3. integer
4. Complex
5. character
6. raw

1. Numeric:

Numeric data type is used to store numeric values, such as integer and floating-point number. For example, you can create a numeric variable called "age" and assign it the value of 25:

Code:

```
age <-25
print (class(age)) ——→ result: [1] "numeric"
v<-23.5
print (class(age))
```

2. Logical:

Logical data type is used to store Boolean (i.e, TRUE or FALSE). For example, you can create a logical variable called "is student" and assign it the value of TRUE

Code

```
isStudent <- TRUE
  print(class(isstudent))
   [1] "logical"
```

3. Integer:

Integer data represents whole numbers and is typically stored as a whole number For example, the number of times an event has occurred would be stored as integer data

eg:-
```
V <- 2L
  print (class(v))
   [1] "integer"
```

4. Complex:

Complex data represents complex number which are numbers that have both a real and imaginary components.

```
v<- 2+ 5i
print(class(v))
[1] "integer"
```

5. Character:

character data type is used to store text or string values. For example, you can create a character variable called "name" and assign it the value of "John"

```
name <- "John"
print (class (name))
[1] "character"

v<- "good"
print (class (v))
[1] "character"
```

6. Raw:

A raw data type specifies values as raw bytes. You can use the following methods

1. charToRaw() - Converts character data to raw data
2. RawToChar - Converts raw data to character data

eg: v <- charToRaw
print(class(v))

[1] "raw"