MDA102-Statistical methods u
Lecture 3

June 24, 2020
6.30 AM – 7.30 AM
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R Studio

- R studio is an integrated development environment (IDE) fo

- combine many projects and R scripts together

- Work on different directories

- manage packages easily

- ability to call up potential syntax options

- to view and interact with the objects stored

- Best of all, like R, RStudio is free and open-source.

Basic functions in R

- To round down to the nearest integer value
  ```
  floor(5.7)
  [1] 5
  ```
- To round up
  ```
  ceiling(5.7)
  [1] 6
  ```
- strip off the decimal part of the number
  ```
  trunc(5.7)
  [1] 5
  ```
- round to the nearest integer
  ```
  round(5.7)
  [1] 6
  round(5.4)
  [1] 5
  ```

R objects - Basic data types in R

Any objects in R can be

- ○ character
  ```
  x<-"Hello"
  class(x)
  [1] "character"
  ```

- ○ numeric (real numbers), any number in R is taken as numeric by defau
  ```
  x<-2.5
  class(x)
  [1] "numeric"
  y<-2
  class(y)
  [1] "numeric"
  ```

R objects - Basic data types in R - Contd...

○ integer (to create an integer variable in R, we invoke the as.integer() f

```
x<-as.integer(2)
class(x)
[1] "integer"
```

○ complex (via the pure imaginary value i)

```
x<-2+3i
class(x)
[1] "complex"
Re(x)  # real part of x
[1] 2
Im(x)  # imaginary part of x
[1] 3
```

R objects - Basic data types in R - Contd…

○ logical (True/False)

```
x<-2
y<-1
z<-x>y
z
[1] TRUE
class(z)
[1] "logical"
x<-2
is.integer(x)
[1] FALSE
is.numeric(x)
[1] TRUE
```