3.1

# Create a vector x storing the sequence 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20.

x <- 10:20

# Add 2 to it. Save the result into a variable called y.

y <- x + 2

# Multiply y by 3. Save that into a variable called z.

z <- y \* 3

# Subtract 6 from z and divide the result by 3. Save what you get into a variable called answer.

answer <- (z – 6)/3

# Print your answer variable.

A number on a white background

Description automatically generated

A screenshot of a computer

Description automatically generated

#Try to do the entire operation in a single line of code.

answer1 = ((c(10:20) + 2)\*3-6)/3



# What do you need to do to get the same result?

Give more ()

# Why is that?

To ensure order of operation

# Do you notice anything about the operations? Do they follow a specific order; how are they carried out?

The order should be:

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3.3

# Create a vector called cards that stores the following elements:

#Blue-Eyes White Dragon

#Exodius

#The Winged Dragon of Ra

#Raigeki

#Slifer the Sky Dragon

#Obelisk the Tormentor

#Black Luster Soldier

#5-Headed Dragon

#Exodia the Forbidden One

#Dragon Master Knight

cards <- c("Blue-Eyes White Dragon", "Exodius", "The Winged Dragon of Ra", "Raigeki", "Slifer the Sky Dragon", "Obelisk the Tormentor", "Black Luster Soldier", "5-Headed Dragon", "Exodia the Forbidden One", "Dragon Master Knight")

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# Check the type of cards.

typeof(cards)



# Create a vector called atk and assign to it the following values:

#3000

#NA

#NA

#NA

#NA

#4000

#3000

#5000

#1000

#5000

atk <- c(3000, NA, NA, NA, NA, 4000, 3000, 5000, 1000, 5000)



# Check the type of atk.

typeof(atk)



# Use the combine function to combine cards and atk into a single vector called yugioh.

yugioh <- c(cards, atk)



# Check the type of the new object.

typeof(yugioh)



# What conclusions can you draw from this?

If in any vector has 1 string type, Everything else will be casted to character type in

# If we had added TRUE/FALSE values to the atk vector, what would have the print(atk) command returned?

IT will return number with FALSE: 0, TRUE: 1

# What about print(yugioh)?

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3.4

# Create a vector called monster, storing the values T, T, T, F, T, T, T, T, T, T.

monster <- c(T, T, T, F, T, T, T, T, T, T)



# Attach the vector you just created to the yugioh vector. Check the type of yugioh..

yugioh <- c(yugioh, monster)



# Is this what you expected?

Yes, everything is converted to character type

# Combine atk and monster into a vector called coerce.check. Check its type and print it, if you need. Try to get the value printed on your screen without typing in the print() command. Can you do that?

coerce.check <- c(atk, monster)



coerce.check

A number with numbers on it

Description automatically generated

# What conclusions can you draw from this about R's coercion rules?

If number and logical type are combine, they are will be casted to num type