Week 1 Exercises

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I am not able to get a pdf document.the miktex appears to be installed but no document is generating.

Please complete all exercises below WITHOUT using any libraries/packages.

Exercise 1

Assign 10 to the variable x. Assign 5 to the variable y. Assign 20 to the variable z.

```
#your code below

x <- 10
y <- 5
z <- 20
```

Exercise 2

Show that x is less than z but greater than y.

Note: your output must be a SINGLE boolean, do not output a boolean for each expression.

```
#your code below
x < z & z > y
```

```
## [1] TRUE
```

Exercise 3

Show that x and y do not equal z.

Note: your output must be a SINGLE boolean, do not output a boolean for each expression.

```
#your code here

x & y != z
```

```
## [1] TRUE
```

Exercise 4

Show that the formula `x + 2y = z` .

Note: your output must be a SINGLE boolean

```
#your code below
is.logical('x + 2y = z')
```

```
## [1] FALSE
```

```
# wasn't sure if you wanted true/false response or numerical, either way I was not able to get t
his one.
```

Exercise 5

I have created a vector (test_vector) of integers for you. Determine if any of x, y, or z are in the vector.

Note: your output must be a SINGLE boolean, do not output a boolean for each expression.

```
test_vector <- c(1,5,11:22)
#your code below

list(x, y, z) %in% test_vector
```

```
## [1] FALSE  TRUE  TRUE
```

Exercise 6

Show which value is contained in the test vector. To do this you will need to create an element-wise logical vector using operators. `x == vector` . Once you have done that you will need to use slicing to return all indices that have matches. **Note: your output should be two integers**

```
#your code below
#no clue on this one
```