

Quiz 2

Le Wang

1. Generate a vector called `x` that is a sequence number from 1 to 9.

$$x = (1, 2, 3, 4, 5, 6, 7, 8, 9)$$

```
x <-
```

2. Select and show what is the 3rd element of the vector `x`.
3. Select the numbers greater than 3 in the vector `x`. Lets do it in two steps to help you understand the process

```
# Step 1. Generate a vector of the same length, but with logical values (i.e., TRUE or FALSE) by  
# evaluating whether or not each element of x is greater than 3. Call this vector select
```

```
select <-  
select
```

```
# Step 2. Put this vector with logical values to select the sub-vector of x. Call it subvector
```

```
subvector <-
```

4. Using `x` to construct the following matrix

$$\begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{pmatrix}$$

```
matrix <-
```

5. Give names to your matrix.

$$\begin{pmatrix} & \text{First} & \text{Second} & \text{Third} \\ \text{Katy} & 1 & 2 & 3 \\ \text{Hunter} & 4 & 5 & 6 \\ \text{Carson} & 7 & 8 & 9 \end{pmatrix}$$

6. Use R to tell you what the respective dimensions of `x` and `matrix`.

```
# dimension of x
```

```
# dimension of matrix
```

7. Create a data frame that looks like

$$\begin{pmatrix} & \text{First} & \text{Second} & \text{Third} \\ 1 & 2 & 3 \\ 4 & 5 & 6 \end{pmatrix}$$

8. Create a tibble dataset that looks like the one above