

Lab 2

Nora Quick

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Consider the following vector:

```
set.seed(12345)
y <- sample(1:100, 20, replace = TRUE)
y
```

```
## [1] 14 51 80 90 92 24 58 93 75 96 88  2 86 75 38 94 10 81 32 40
```

Write code in the chunks below to answer these questions:

- Are the values in `y` less than or equal to 50?

```
y <= 50
```

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

- How many values in `y` are less than or equal to 50?

```
sum(y <= 50)
```

```
## [1] 7
```

- What proportion of values in `y` are less than or equal to 50?

```
mean(y <= 50)
```

```
## [1] 0.35
```

- Which values in `y` are less than or equal to 50?

```
y[y <= 50]
```

```
## [1] 14 24  2 38 10 32 40
```

- Which values in `y` are greater than 25 *and* less than 75?

```
y[y > 25 & y < 75]
```

```
## [1] 51 58 38 32 40
```

- Which values in `y` are less than 25 *or* greater than 75?

```
y[y < 25 | y > 75]
```

```
## [1] 14 80 90 92 24 93 96 88 2 86 94 10 81
```