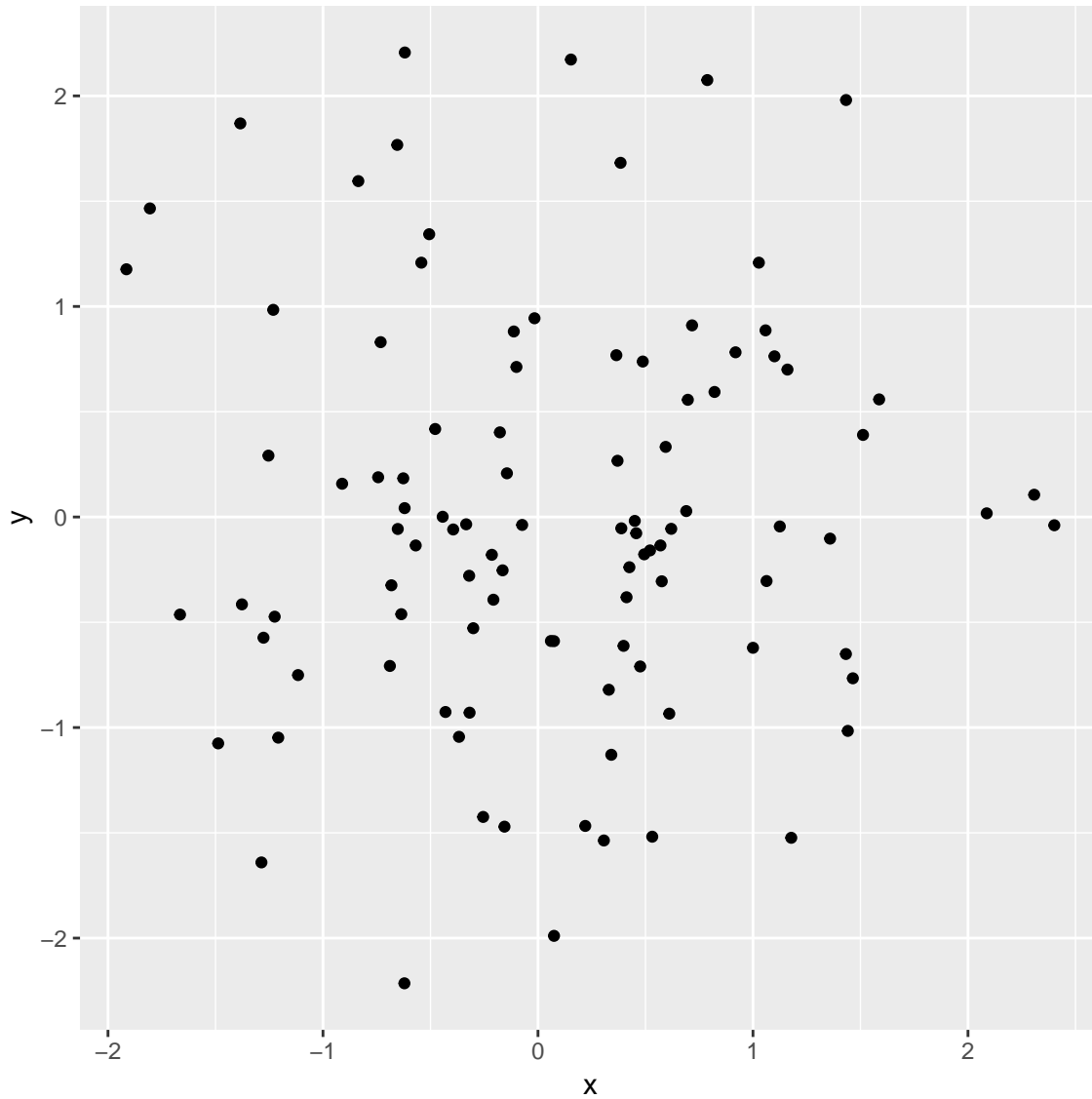


Guess the correlation; is the correlation useful in this example?

```
ggplot(data = example, mapping = aes(x = x, y = y)) +  
  geom_point()
```



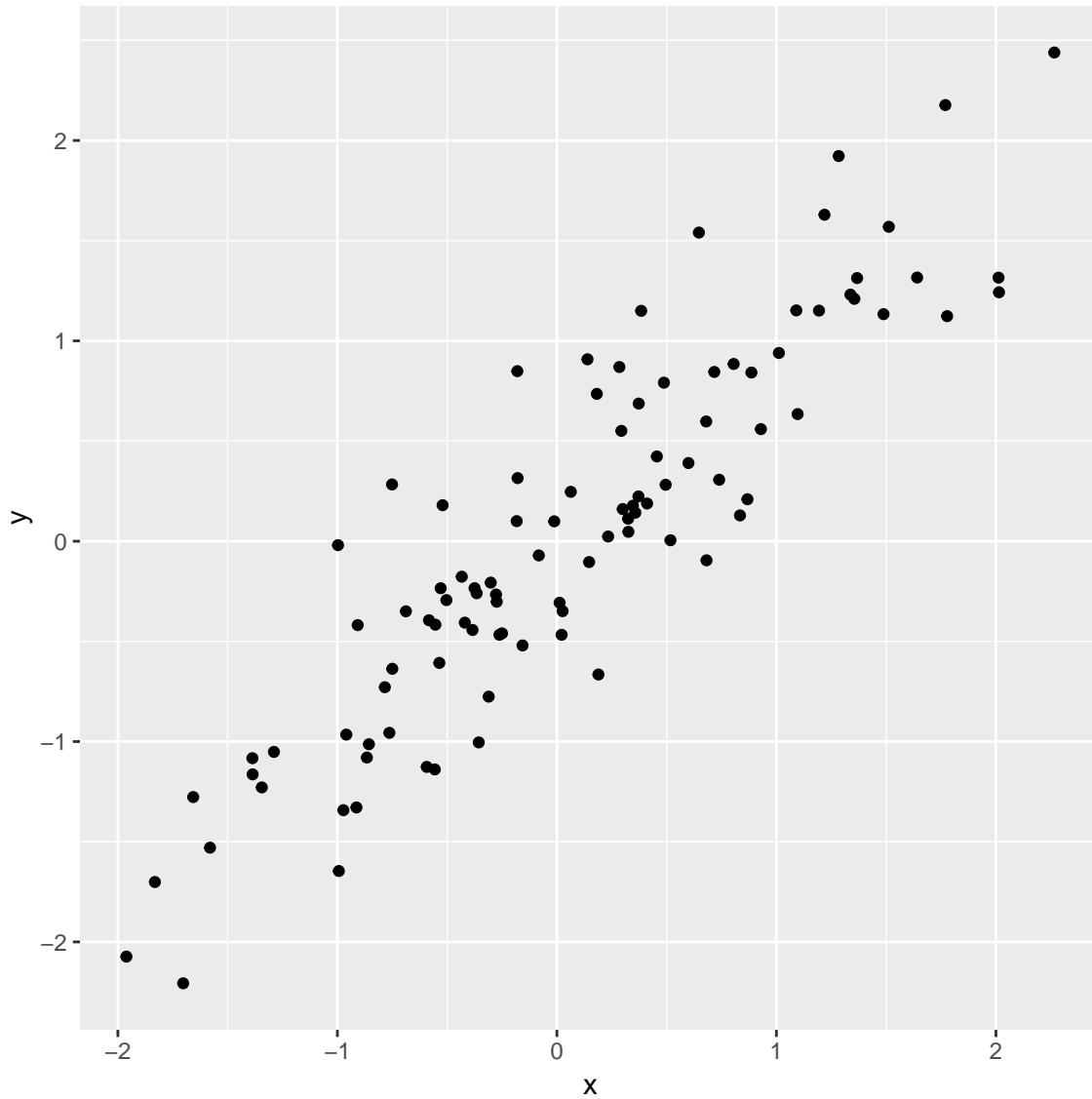
```
example %>%  
  cor()
```

```
##           x           y  
## x 1.000000000 0.006915597  
## y 0.006915597 1.000000000
```

The correlation is useful in this example.

Guess the correlation; is the correlation useful in this example?

```
ggplot(data = example, mapping = aes(x = x, y = y)) +  
  geom_point()
```



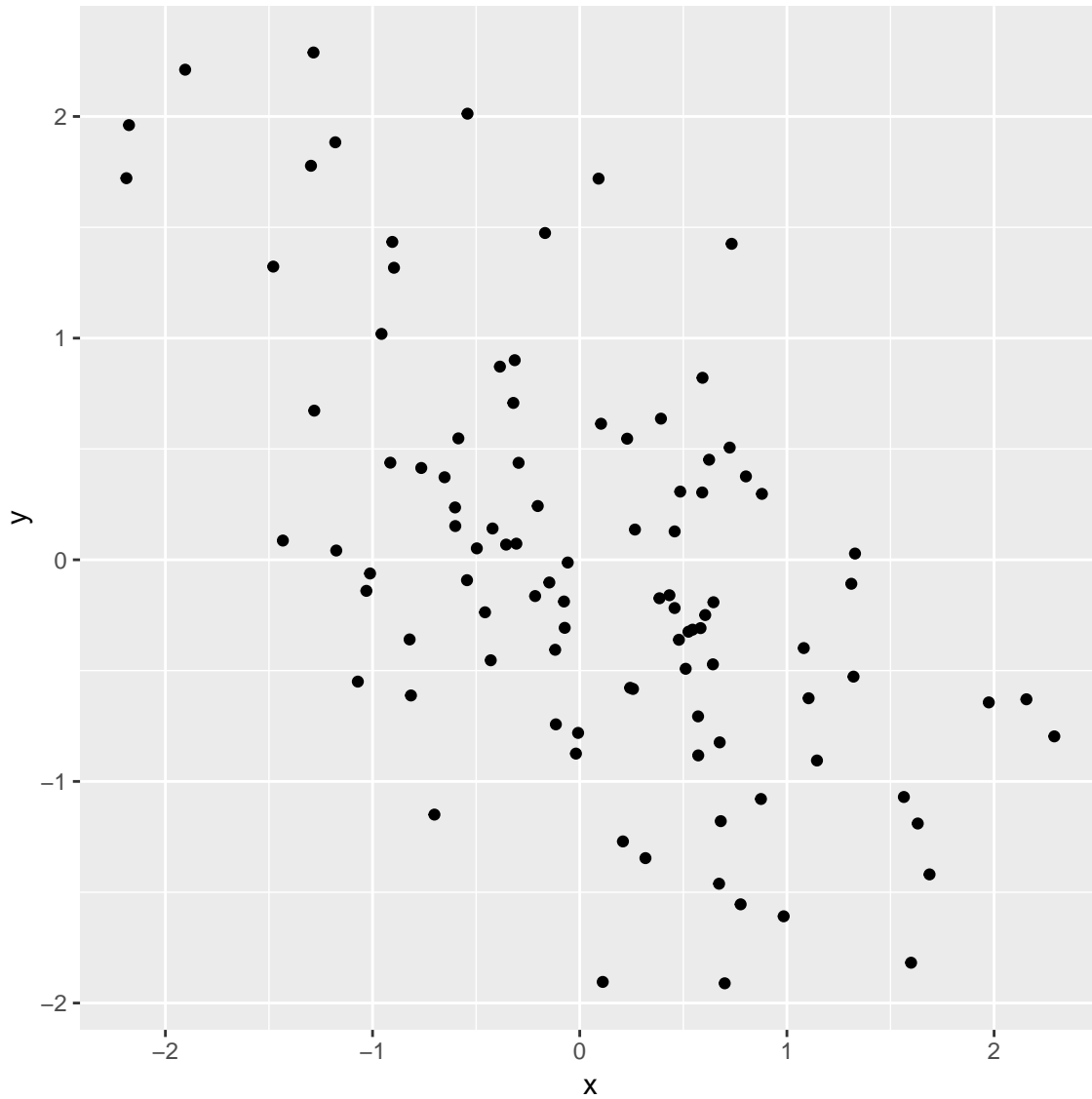
```
example %>%  
  cor()
```

```
##           x           y  
## x 1.0000000 0.9013874  
## y 0.9013874 1.0000000
```

The correlation is useful in this example.

Guess the correlation; is the correlation useful in this example?

```
ggplot(data = example, mapping = aes(x = x, y = y)) +  
  geom_point()
```



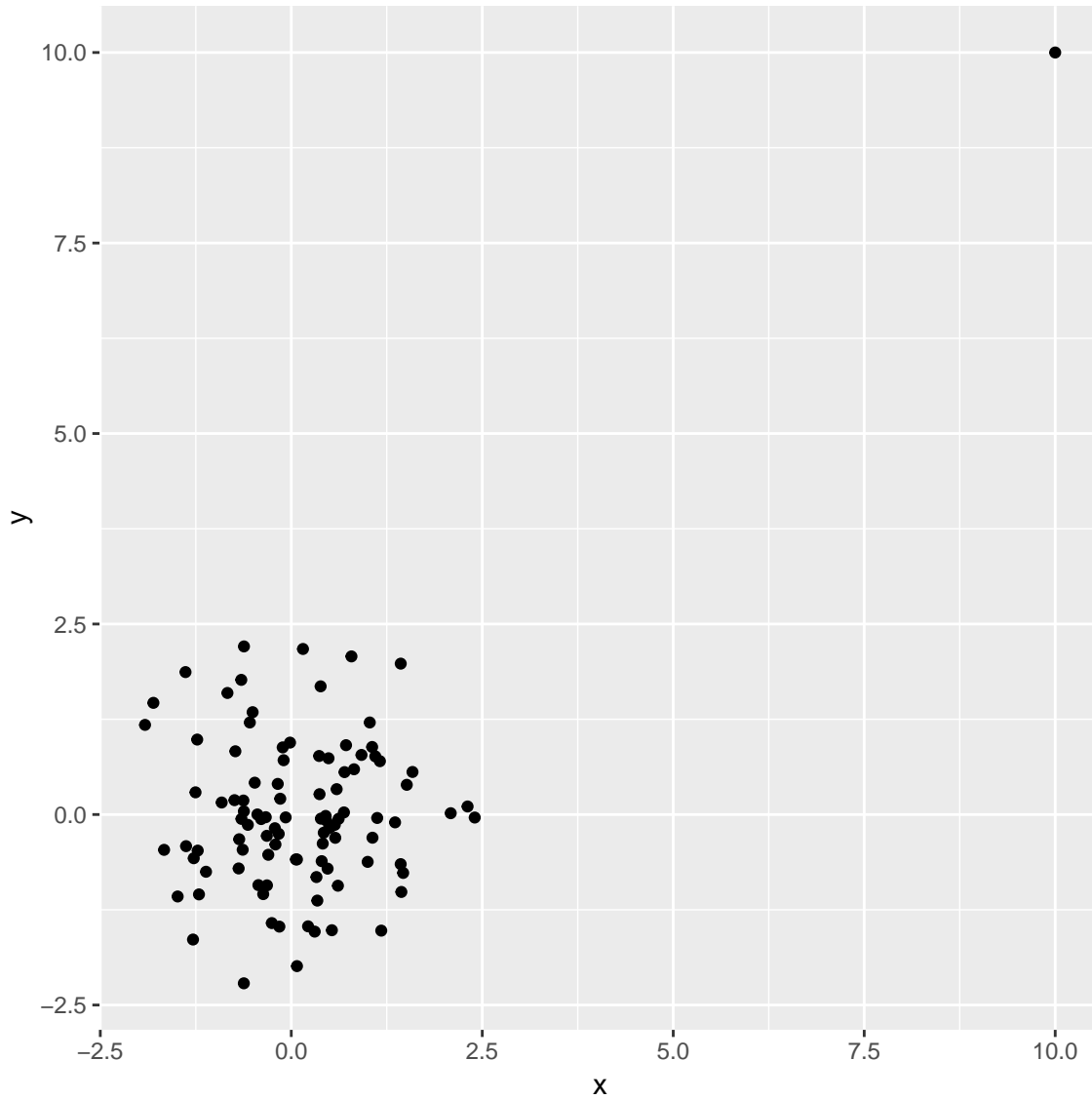
```
example %>%  
  cor()
```

```
##           x           y  
## x  1.0000000 -0.5957445  
## y -0.5957445  1.0000000
```

The correlation is useful in this example.

Guess the correlation; is the correlation useful in this example?

```
ggplot(data = example, mapping = aes(x = x, y = y)) +  
  geom_point()
```



```
example %>%  
  cor()
```

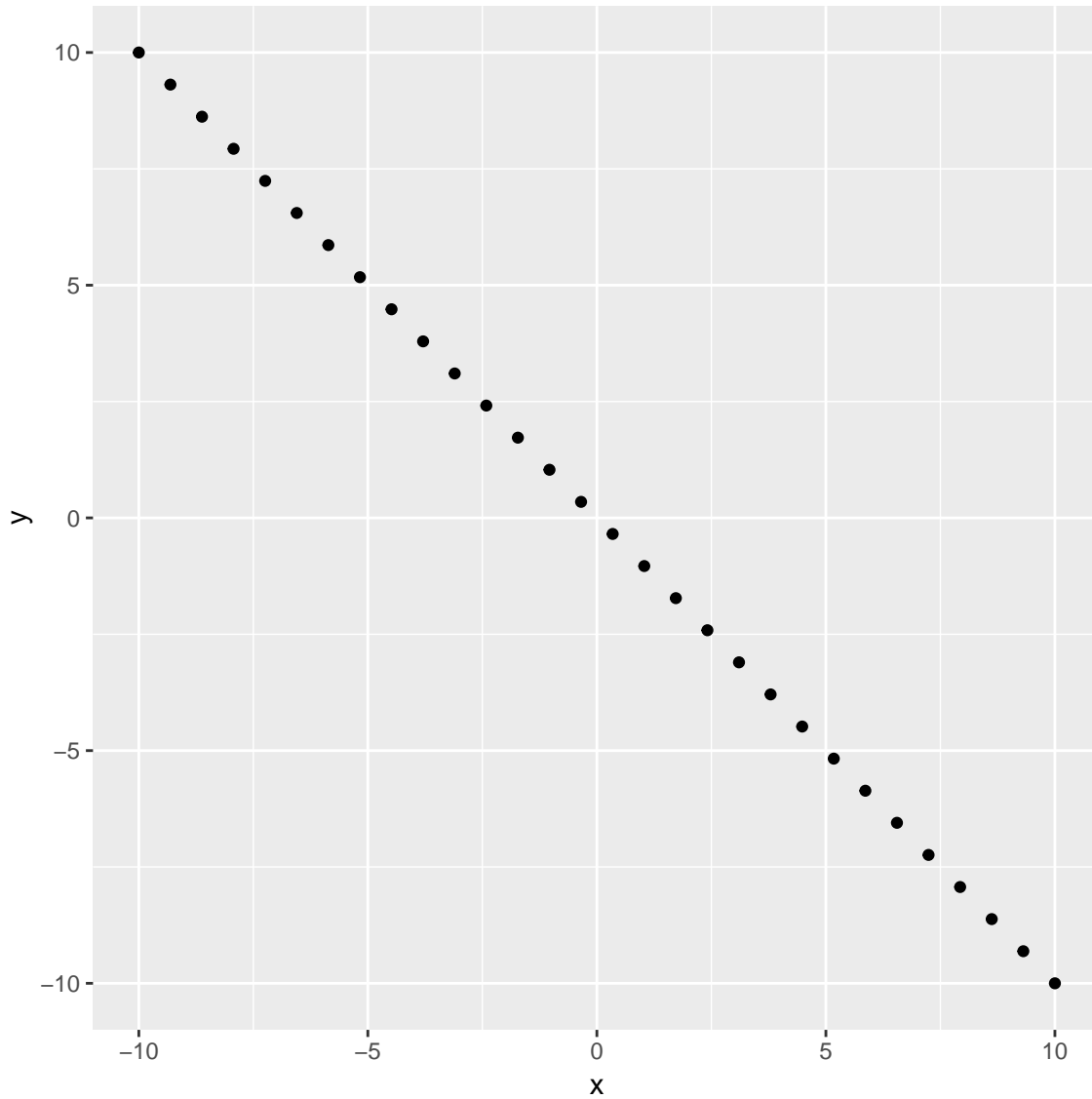
```
##           x           y  
## x 1.0000000 0.5373873  
## y 0.5373873 1.0000000
```

The correlation is not useful in this example; there is an outlier.



## Guess the correlation

```
ggplot(data = example, mapping = aes(x = x, y = y)) +  
  geom_point()
```



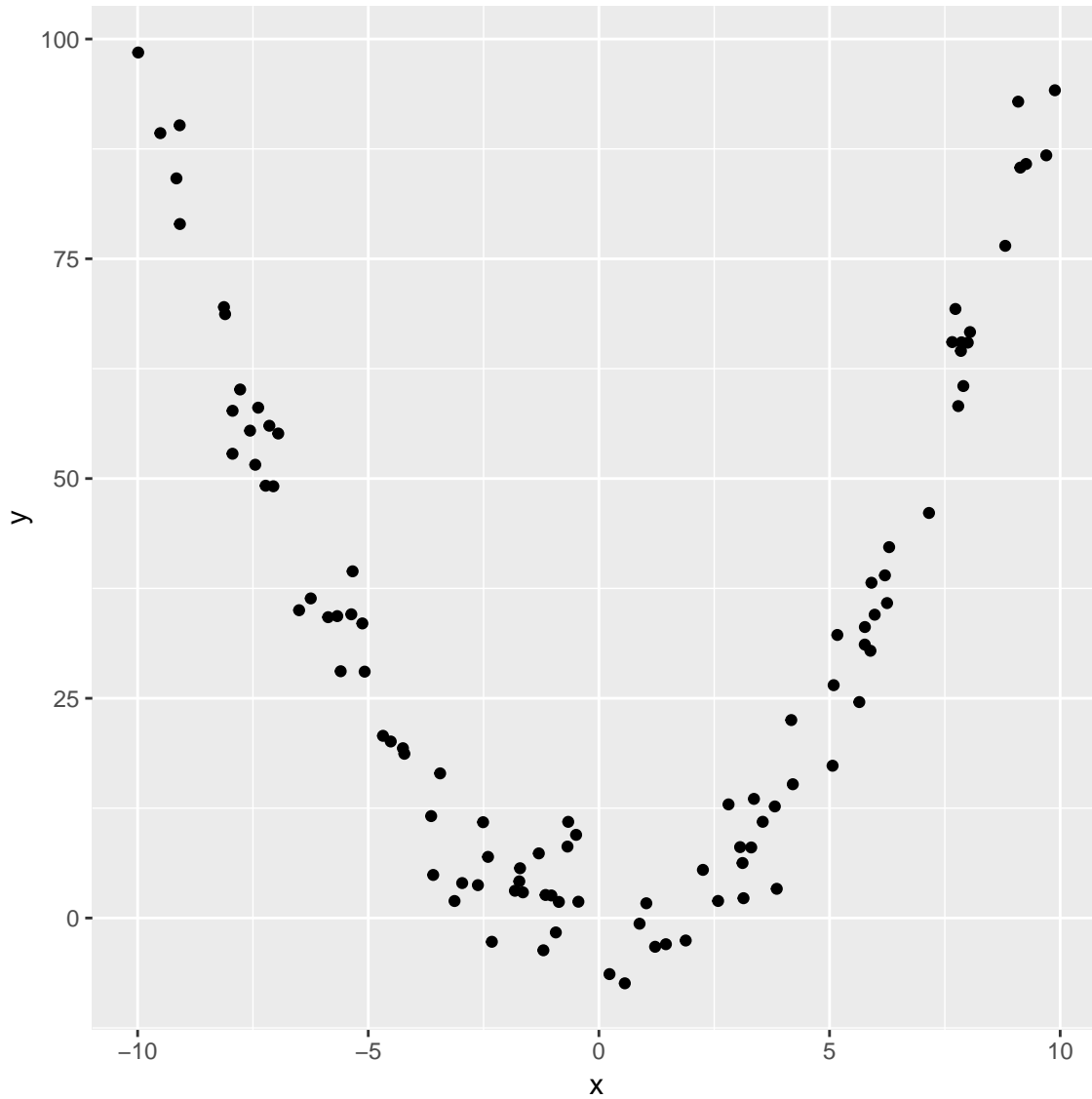
```
example %>%  
  cor()
```

```
##      x  y  
## x   1 -1  
## y  -1  1
```

The correlation is useful in this example.

Guess the correlation; is the correlation useful in this example?

```
ggplot(data = example, mapping = aes(x = x, y = y)) +  
  geom_point()
```



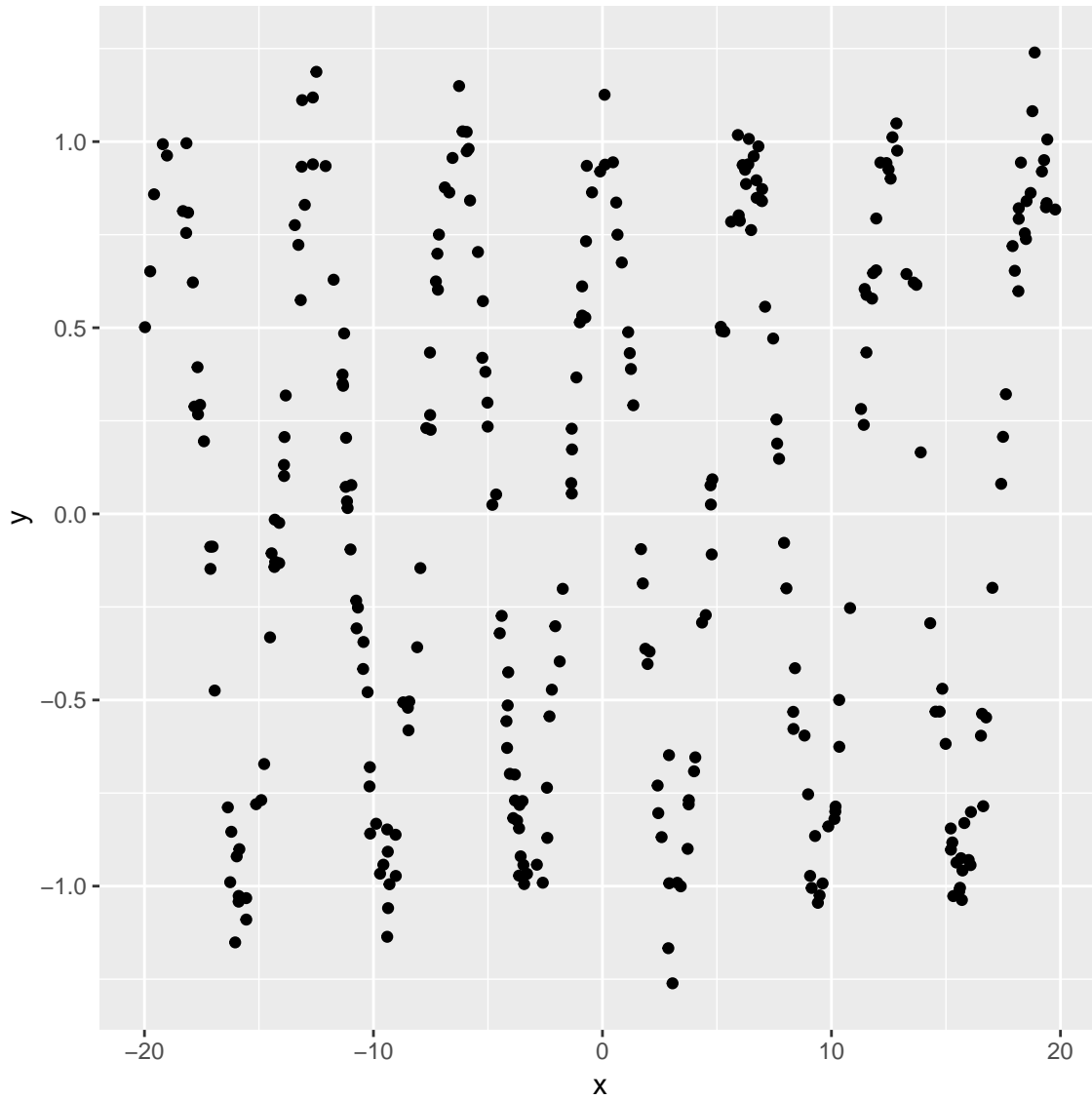
```
example %>%  
  cor()
```

```
##           x           y  
## x 1.00000000 0.02204531  
## y 0.02204531 1.00000000
```

Correlation is not useful; non-linear relationship

Guess the correlation; is the correlation useful in this example?

```
ggplot(data = example, mapping = aes(x = x, y = y)) +  
  geom_point()
```



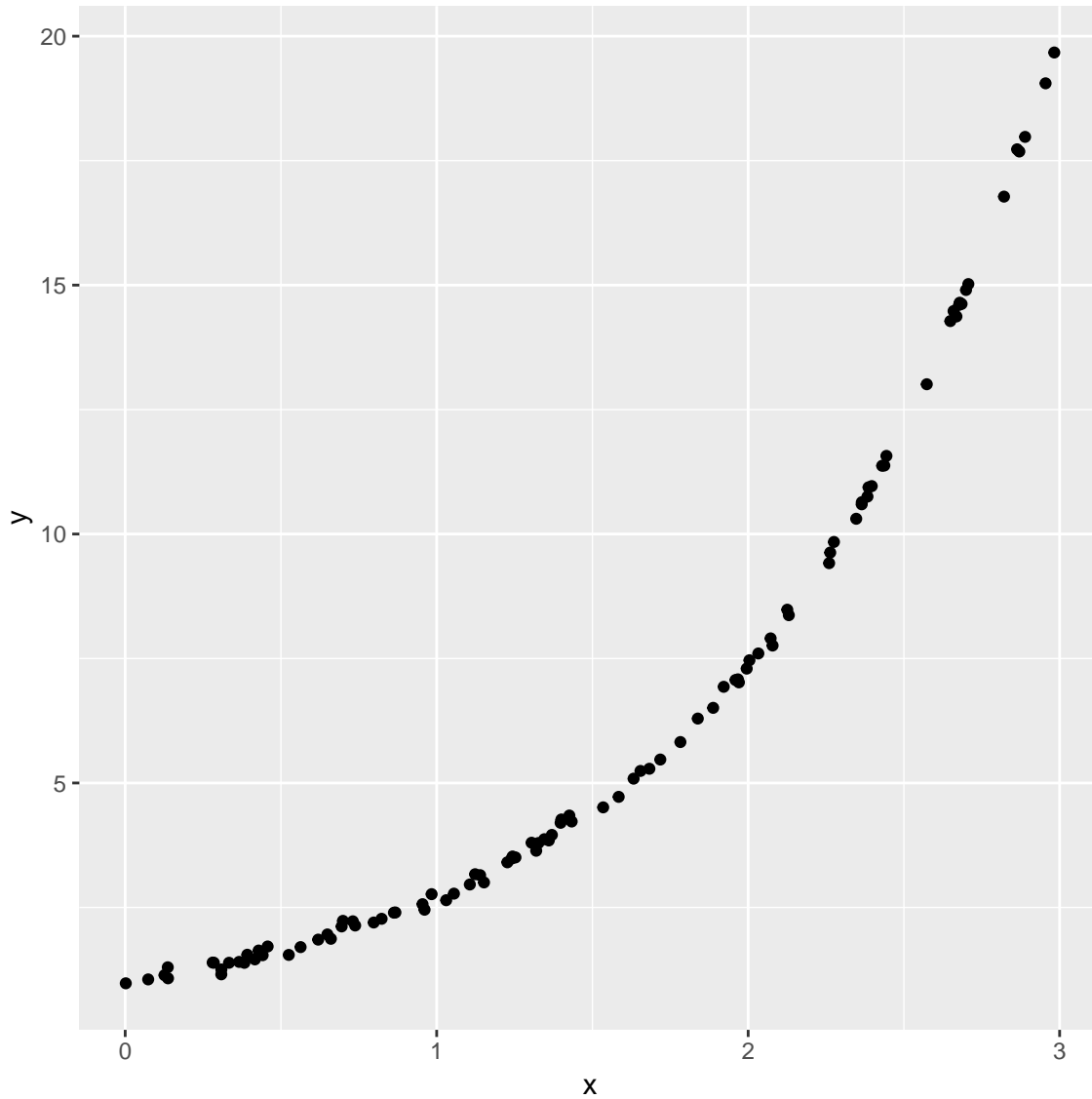
```
example %>%  
  cor()
```

```
##           x           y  
## x 1.0000000 0.0564454  
## y 0.0564454 1.0000000
```

Correlation is not useful; non-linear relationship.

Guess the correlation; is the correlation useful in this example?

```
ggplot(data = example, mapping = aes(x = x, y = y)) +  
  geom_point()
```



```
example %>%  
  cor()
```

```
##           x           y  
## x 1.0000000 0.9389025  
## y 0.9389025 1.0000000
```

Correlation is not useful; non-linear relationship