

```
In [1]: from pyspark.sql import SparkSession
import pyspark.sql.functions as F
from pyspark.sql.types import *

spark = SparkSession\
    .builder\
    .appName("chapter-04-overview")\
    .getOrCreate()
```

```
In [ ]: df = spark.range(500).toDF("number")
```

```
In [11]: type(df)
```

```
Out[11]: pyspark.sql.dataframe.DataFrame
```

```
In [4]: df.select(df["number"] + 10).show(5)
```

```
+-----+
| (number + 10) |
+-----+
|             10|
|             11|
|             12|
|             13|
|             14|
+-----+
only showing top 5 rows
```

```
In [5]: df.selectExpr("number + 10").show(5)
```

```
+-----+
| (number + 10) |
+-----+
|             10|
|             11|
|             12|
|             13|
|             14|
+-----+
only showing top 5 rows
```

```
In [6]: df.select(F.col("number") + 10).show(5)
```

```
+-----+
| (number + 10) |
+-----+
|             10|
|             11|
|             12|
|             13|
|             14|
+-----+
only showing top 5 rows
```

```
In [7]: spark.range(2).collect()
```

```
Out[7]: [Row(id=0), Row(id=1)]
```

```
In [8]: from pyspark.sql.types import *
b = ByteType()
```

```
In [10]: type(b)
```

```
Out[10]: pyspark.sql.types.ByteType
```

```
In [ ]:
```