

# VARIABLES

## Rules for naming the variable

1. variable can have alphabets[a-z,A-Z]
2. variable name should not start with a number
3. variable do not allow special character other than underscore
4. case sensitive

```
In [3]: x = y = z = "test"
        z
```

```
Out[3]: 'test'
```

```
In [4]: y
```

```
Out[4]: 'test'
```

```
In [5]: Books = ["ds with python","ba with python"]
        Books
```

```
Out[5]: ['ds with python', 'ba with python']
```

```
In [6]: books ## python is a case sensitive
```

```
-----
NameError                                Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_3728\1731987864.py in <module>
----> 1 books

NameError: name 'books' is not defined
```

```
In [7]: B2ooks = ["ds with python","ba with python"]
        B2ooks
```

```
Out[7]: ['ds with python', 'ba with python']
```

```
In [8]: book*list = ["ds with python","ba with python"]
        book*list                                ## can not use special character
```

```
File "C:\Users\kesha\AppData\Local\Temp\ipykernel_3728\1919327411.py", line 1
    book*list = ["ds with python","ba with python"]
    ^
SyntaxError: cannot assign to operator
```

## Types of Analytics

1. Descriptive -> (what happened in the past)
2. Diagnostic -> (why)
3. Predictive -> {future}
4. Prescriptive -> {solution}

