ADS ASSIGNMENT 1

20BCG10024 - SATYAM SONI

****

1.

```
name = "Satyam" age = 21

print("My name is", name, "and I am", age, "years old.")
```

2.

```
X = "Datascience is used to extract meaningful insights."

print(X.split())
```

3.

```
def multiply(a, b): return a * b

print(multiply(2, 3))
```

4.

```
states = {
  "California": "Sacramento",
  "Texas": "Austin",
  "Florida": "Tallahassee",
  "New York": "Albany",
  "Illinois": "Springfield"
}

for key, value in states.items():
  print(key, "is the capital of", value)
```

5.

```
numbers = list(range(1000))

print(numbers)
```

Code snippet

6.

```
identity_matrix = [[1, 0, 0, 0],
                   [0, 1, 0, 0],
                   [0, 0, 1, 0],
                   [0, 0, 0, 1]]

print(identity_matrix)
```

7.

```
matrix = [[1, 2, 3], [4, 5, 6], [7, 8, 9]]

print(matrix)
```

8.

```
array1 = [1, 2, 3]
array2 = [4, 5, 6]

print(array1 + array2)
```

9.

```
import datetime

start_date = datetime.date(2023, 2, 1) end_date = datetime.date(2023, 3, 1)

dates = []

while start_date <= end_date: dates.append(start_date) start_date +=
datetime.timedelta(days=1)

print(dates)
```

10.

```
import pandas as pd

dictionary = {'Brand': ['Maruti', 'Renault', 'Hyndai'], 'Sales' : [250, 200, 240]}

df = pd.DataFrame(dictionary)

print(df)
```