# Paper Coding Worksheet

| Chapter:      | 2               |
|---------------|-----------------|
| Unit:         | 10              |
| Student Name: | Aman Dhaubanjar |

1.

```
prime_list = [2, 3, 5, 7]
print("1st element of prime_list:", prime_list[0])
```

# output:

1st element of prime\_list: 2

2.

```
prime_list = [2, 3, 5, 7]
```

prime\_list.append(11)

print("Prime numbers after addition:", prime\_list)

### output:

Prime numbers after addition: [2, 3, 5, 7, 11]

3.

$$list1 = [3, 5, 7]$$

$$list2 = [2, 3, 4, 5, 6]$$

for i in list1:

for j in list2:

$$print(f"{i} x {j} = {i * j}")$$

### output:

 $3 \times 2 = 6$ 

 $3 \times 3 = 9$ 

 $3 \times 4 = 12$ 

 $3 \times 5 = 15$ 

 $3 \times 6 = 18$ 

 $5 \times 2 = 10$ 

 $5 \times 3 = 15$ 

 $5 \times 4 = 20$ 

 $5 \times 5 = 25$ 

 $5 \times 6 = 30$ 

 $7 \times 2 = 14$ 

 $7 \times 3 = 21$ 

 $7 \times 4 = 28$ 

 $7 \times 5 = 35$ 

 $7 \times 6 = 42$ 

| Chapter:      | 2               |
|---------------|-----------------|
| Unit:         | 11              |
| Student Name: | Aman Dhaubanjar |

#### 1.

```
capital_dic = {"Korea": "Seoul", "China": "Beijing", "USA": "Washington DC"}
print("Capital of Korea:", capital_dic["Korea"])
```

### output:

Capital of Korea: Seoul

## 2.

```
fruits_dic = {"banana": 4000, "melon": 6500, "apple": 5000, "grape": 5300}
for fruit, price in fruits_dic.items():
    print(f"The price of {fruit} is {price} KRW.")
```

### output:

The price of banana is 4000 KRW.

The price of melon is 6500 KRW.

The price of apple is 5000 KRW.

The price of grape is 5300 KRW.

| Chapter:      | 2               |
|---------------|-----------------|
| Unit:         | 12              |
| Student Name: | Aman Dhaubanjar |

### 1.

True

False

True

('a', 'b', 'c', 'd', 'e')

[('a', 'b', 'c', 'd', 'e')]

('a', 'b', 'c')

### 2.

```
sales = (100, 121, 120, 130, 140, 120, 122, 123, 190, 125)
reduced_days = sum(1 for i in range(1, len(sales)) if sales[i] < sales[i - 1])
print(f"Days with reduced sales: {reduced_days}")
```

### output:

Days with reduced sales: 3

| Chapter:      | 2               |
|---------------|-----------------|
| Unit:         | 13              |
| Student Name: | Aman Dhaubanjar |

#### 1.

```
list_array = [[10, 20], [30, 40], [50, 60]]
```

```
print("Value at index [1][0]:", list_array[1][0])
output:
Value at index [1][0]: 30
2.
matrix = [[i + j * 4 + 1 \text{ for } i \text{ in } range(4)] \text{ for } j \text{ in } range(4)]
for row in matrix:
   for element in row:
       print(element, end=" ")
   print()
output:
1234
5678
9 10 11 12
13 14 15 16
```

| Chapter:      | 2               |
|---------------|-----------------|
| Unit:         | 14              |
| Student Name: | Aman Dhaubanjar |

```
1.
```

```
person_dic = {"Last Name": "Doe", "First Name": "David", "Company": "Samsung"}
for key, value in person_dic.items():
   print(f"{key}: {value}")
output:
Last Name: Doe
First Name: David
Company: Samsung
2.
items = {"Coffee": 7, "Pen": 3, "Paper cup": 2, "Milk": 1, "Coke": 4, "Book": 5}
```

input\_item = input("Enter name of the item: ")

```
if input_item in items:
    print(items[input_item])
```

#### output:

Enter name of the item: Milk

1

| Chapter:      | 2               |
|---------------|-----------------|
| Unit:         | 15              |
| Student Name: | Aman Dhaubanjar |

```
1.
student_tup = [('211101', 'David Doe', '010-1234-4500'), ('211102', 'John Smith', '010-2230-6540'),
('211103', 'Jane Carter', '010-3232-7788')]
students = [{sid: [name, phone]} for sid, name, phone in student_tup]
for student in students:
   print(student)
output:
{'211101': ['David Doe', '010-1234-4500']}
{'211102': ['John Smith', '010-2230-6540']}
{'211103': ['Jane Carter', '010-3232-7788']}
2..
student_tup = [('211101', 'David Doe', '010-1234-4500'), ('211102', 'John Smith', '010-2230-6540'),
('211103', 'Jane Carter', '010-3232-7788')]
students = [{sid: [name, phone]} for sid, name, phone in student_tup]
sid = input("Enter student ID: ")
for student in students:
   if sid in student:
```

print(f"Name: {student[sid][0]} \Phone number: {student[sid][1]}")

## output:

Enter student ID: 211101

Name: David Doe

Phone number: 010-1234-4500

| Chapter:      | 2               |
|---------------|-----------------|
| Unit:         | 16              |
| Student Name: | Aman Dhaubanjar |

#### 1

```
lst = ['apple', 'mango', 'banana']
s1 = set(lst)
print("s1 =", s1)
```

# output:

```
s1 = {'banana', 'apple', 'mango'}
```

### 2.

{70, 40, 10, 50, 20, 60, 30}

{40, 30}

{10, 20}

{50, 20, 70, 10, 60}

False

False

False