Riphah International University

Artificial Intelligence (AI)

Lab 2

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Section: BSCS-6A

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Lab

```
fruit=["apple","banana","mango","cherry","pineapple"]
print(fruit[1:5])
```

Python

```
['banana', 'mango', 'cherry', 'pineapple']
```

```
fruit=("apple","banana","mango","cherry","pineapple")
print(fruit[1:5])
```

Python

```
('banana', 'mango', 'cherry', 'pineapple')
```

```
fruit={"apple","banana","mango","cherry","pineapple"}
print(fruit)
```

Python

```
{'banana', 'mango', 'cherry', 'apple', 'pineapple'}
```

```
Qasim = {
    "Uni": "Riphah",
    "Name": "Qasim",
    "sap": "37137"
}
print(Qasim["sap"])
for key, value in Qasim.items():
    print(f"{key}: {value}")
print(Qasim.keys())
```

[3] Python

```
37137
Uni: Riphah
Name: Qasim
sap: 37137
dict_keys(['Uni', 'Name', 'sap'])
```

```
check:None
name=input("Enter Name")

if name == "Qasim":
    check = True
    print(check)
else:
    check = False
    print(check)
```

[3] Python

```
Enter NameQasim
True
```

```
color=["green","red","yellow","pink","cyan"]
name=input("Enter Name")
if name=="Qasim":
  print(color[0])
elif name=="Imran":
  print(color[3])
```

[2] ✓ 0.0s Python

```python
n=1
while n<=10:
  print(str(n),"\n")
  n+=1
```

[1] Python

```
1

2

3

4

5

6

7

8

9

10
```

```python
color=["green","red","yellow","pink","cyan"]
name=input("Enter Name")
if name=="Qasim":
  print(color[0])
elif name=="Imran":
  print(color[3])
```

[2] ✓ 0.0s Python

```python
#1
numbers=[1,2,3,4,5,6,7,8,9,10]
for x in numbers:
  if x%2==0: #we will not use numbers[x]%2 because x directly pOINTS TO THE value and not the index
    print(x)
```

[ ] Python

```
2
4
6
8
10
```

```python
#2
numbers=[1,2,3,4,5,6,7,8,9,10]
for x in numbers:
    if x > 1:
        for i in range(2, x):
            if (x % i) == 0:
                break
        else:
            print(x)
```

[ ] Python

```
2
3
5
7
```

```python
#3
numbers=[1,2,3,4,5,6,7,8,9,10]
check=False
inp=input("Enter Number to Search: ")
inp=int(inp)
for x in numbers:
  if x==inp:
    print(str(x) + " Found in numbers list")
    check=True
else:
  if check==False:
    print("Not Found")
```

Python

```
Enter Number to Search: 8
8 Found in numbers list
```

```python
#4
numbers=[1,2,3,4,5,6,7,8,9,10]
sum(numbers)
```

Python

```
55
```

```python
#5
numbers=[1,2,3,4,5,6,7,8,9,10]
print(max(numbers))
print(min(numbers))
```

Python

```
10
```

```python
#6
fruits_and_vegs=[["apple", "banana", "orange"],["eggplant","onion"]]
check=False
inp=input("Enter Fruit or Vegetable: ")
for x in fruits_and_vegs:
  if inp in x:
    print(inp +" Found")
    check=True
else:
  if check==False:
    print(inp+" Not Found")
```

Python

```
Enter Fruit or Vegetable: tomato
tomato Not Found
```