ids-day-1

December 16, 2023

```
[16]: list=['hari','sumasen','allwin']
      print(list)
```

```
['hari', 'sumasen', 'allwin']
```

```
[22]: cars = ["Ford", "Volvo", "BMW"]

      x = cars[2],cars[1]

      print(x)
```

```
('BMW', 'Volvo')
```

```
[23]: X = [[12,7,3],
           [4 ,5,6],
           [7 ,8,9]]

      Y = [[5,8,1],
           [6,7,3],
           [4,5,9]]

      result = [[X[i][j] + Y[i][j]  for j in range(len(X[0]))] for i in range(len(X))]

      for r in result:
         print(r)
```

```
[17, 15, 4]
[10, 12, 9]
[11, 13, 18]
```

```
[ ]: ex 1 SAMPLE VIVA QUESTIONS
```

```
[31]: #URK22AI1048 1Q
      list=[2,5,3,13]
      sum=0
      for i in range(len(list)):
                    sum=sum+list[i]
      print(sum)
```

23

```
[37]: #URK22AI1048 2Q
      def Remove(duplicate):
          list = []
          for num in duplicate:
              if num not in list:
                  list.append(num)
          return list


      duplicate = [2, 4, 10, 20, 5, 2, 20, 4,3,3]
      print(Remove(duplicate))
```

      [2, 4, 10, 20, 5, 3]

```
[50]: #URK22AI1048 3Q
      def common_data(l1, l2):
          result = False
          for x in l1:
              for y in l2:
                  if x == y:
                      result = True
                      return result
          return result
      a = [5, 46, 89, 7,9]
      b = [1, 2, 4, 5]
      print(common_data(a,b))
```

      True

```
[54]: #URK22AI1048 4Q
      l1 = [10, 15, 20, 25, 30, 35, 40]
      l2 = [25, 40, 35]

      l3 = []
      for element in l1:
          if element not in l2:
              l3.append(element)

      print(l3)
```

      [10, 15, 20, 30]

```
[63]: #URK22AI1048 5Q
      def checkKey(dic, key):
          if key in dic.keys():
              print("Present, ", end ="")
```

```
        print("value =", dic[key])
    else:
        print("Not present")


dic = {'a': 100, 'b':200, 'c':300}
key = 'b'
checkKey(dic, key)

key = 'w'
checkKey(dic, key)
```

```
Present, value = 200
Not present
```

[65]:
```python
#URK22AIU1048 6Q
str1 = "WELCOME"
count=0

for i in str1:
    if i == 'E':
        count = count + 1


print("Count of E in WELCOME is : "+ str(count))
```

```
Count of E in WELCOME is : 2
```

[75]:
```python
#URK22AI1048 7Q

students_data = {
    '1o48': {'name': 'hari', 'dept': 'Computer Science'},
    '1049': {'name': 'Sam', 'dept': 'Electrical Engineering'},
    '1050': {'name': 'allwin', 'dept': 'Mechanical Engineering'},

}


def get_student_info(regno):
    return students_data.get(regno, None)


registration_number = '1o48'
student_info = get_student_info(registration_number)

if student_info:
    print(f"Student Name: {student_info['name']}")
```

```python
        print(f"Department: {student_info['dept']}")
else:
    print(f"Student with registration number {registration_number} not found.")
```

```
Student Name: hari
Department: Computer Science
```

[71]:
```python
#URK22AI1048 8Q
election = {"candidate1": 50, "candidate2": 32, "candidate3": 76, "candidate4":
    43, "candidate5": 65}


winner = max(election, key=election.get)

print(f"The winner is {winner} with {election[winner]} votes.")
```

```
The winner is candidate3 with 76 votes.
```

[74]:
```python
#URK22AI1048 9Q
original_tuple = (1, 2, 3, 4, 5)

new_item = 6

new_tuple = original_tuple + (new_item,)


print("Original Tuple:", original_tuple)
print("New Tuple:", new_tuple)
```

```
Original Tuple: (1, 2, 3, 4, 5)
New Tuple: (1, 2, 3, 4, 5, 6)
```

[82]:
```python
#URK22AI1048 10Q
import numpy as np

numbers = np.array([2, 4, 6, 8, 10])

squares = np.square(numbers)
for num, square in zip(numbers, squares):
    print(f"The square of {num} is: {square}")
```

```
The square of 2 is: 4
The square of 4 is: 16
The square of 6 is: 36
The square of 8 is: 64
The square of 10 is: 100
```