

Q1. Create a python program to sort the given list of tuples based on integer value using a lambda function. [('Sachin Tendulkar', 34357), ('Ricky Ponting', 27483), ('Jack Kallis', 25534), ('Virat Kohli', 24936)]

In [6]:

```
list = [('Sachin Tendulkar', 34357), ('Ricky Ponting', 27483), ('Jack Kallis', 25534), ('Virat Kohli', 24936)]
sorted_list = sorted(list, key=lambda x: x[1])
print(sorted_list)
```

```
[('Virat Kohli', 24936), ('Jack Kallis', 25534), ('Ricky Ponting', 27483), ('Sachin Tendulkar', 34357)]
```

Q2. Write a Python Program to find the squares of all the numbers in the given list of integers using lambda and map functions. [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

In [1]:

```
list1 = [1,2,3,4,5,6,7,8,9,10]
squares = list(map(lambda x : x**2,list1))
print(squares)
```

```
[1, 4, 9, 16, 25, 36, 49, 64, 81, 100]
```

Q3. Write a python program to convert the given list of integers into a tuple of strings. Use map and lambda functions Given String: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

In [2]:

```
given_list = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
new_list = tuple(map(lambda x :str(x),given_list ))
print(new_list)
```

```
('1', '2', '3', '4', '5', '6', '7', '8', '9', '10')
```

Q4. Write a python program using reduce function to compute the product of a list containing numbers from 1 to 25.

In [3]:

```
from functools import reduce
l = list(range(1,26))
product = reduce(lambda x,y : x*y ,l)
print(product)
```

```
15511210043330985984000000
```

Q5. Write a python program to filter the numbers in a given list that are divisible by 2 and 3 using the filter function. [2, 3, 6, 9, 27, 60, 90, 120, 55, 46]

In [4]:

```
l = [2, 3, 6, 9, 27, 60, 90, 120, 55, 46]
filter_1 = list(filter(lambda x : x%2==0 or x%3==0,l))
print(filter_1)
```

```
[2, 3, 6, 9, 27, 60, 90, 120, 46]
```

Q6. Write a python program to find palindromes in the given list of strings using lambda and filter function. ['python', 'php', 'aba', 'radar', 'level']

In [5]:

```
my_list = ['python', 'php', 'aba', 'radar', 'level']
palindromes = list(filter(lambda x: x == x[::-1], my_list))
print(palindromes)
```

```
['php', 'aba', 'radar', 'level']
```