ASSIGNMENT-4

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)]

```
21

[1]: from functools import reduce

l1 = [('Sachin Tendulkar', 34357), ('Ricky Ponting', 27483), ('Jack Kallis', 25534), ('Virat Kohli', 24936)]
l1.sort(key=lambda x: x[1])
print(l1)

[('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]

```
2]: l2 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
    print(list(map(lambda x: x * x, l2)))

    [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]

Expected output: ('1', '2', '3', '4', '5', '6', '7', '8', '9', '10')

```
l3 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
print(tuple(map(lambda x: str(x), l3)))
```

```
('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.

```
5]: l4 = list(range(1, 26))
    print(l4)
    sum = reduce(lambda x, y: x + y, l4)
    sum1 = reduce(lambda x, y: x * y, l4)
    print(sum)
    print(sum1)
```

```
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25]
325
15511210043330985984000000
```

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]:
```

Q5. Write a python program to filter the numbers in a given list that are divisible by 2 and 3 using the

filter function.

```
[6]: l5 = [2, 3, 6, 9, 27, 60, 90, 120, 55, 46]
     print(list(filter(lambda x: x % 2 == 0 and x % 3 == 0, l5)))
```

```
[6, 60, 90, 120]
```

```
[ ]:
```

Q6. Write a python program to find palindromes in the given list of strings using lambda and filter

function.

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