

## Assignment



**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)]**

Ans.

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

```
lists.sort(key=lambda x :x[1], reverse=False)
```

```
lists
```

**Output:**

```
[('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]**

Ans.

```
List=[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
```

```
list(map(lambda x : x**2,List))
```

**OUTPUT:**

```
[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')**

Answer.

```
tuple(map(lambda x: str(x),String))
```

**OUTPUT:**

```
('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.**

**Answer .**

```
Lists=[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]
from functools import reduce
reduce(lambda x,y: x*y, Lists)
```

**OUTPUT:**

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]

**Answer:**

```
list(filter(lambda x: (x%2==0) and (x%3==0),seq))
```

**OUTPUT**

[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']

**Answer:**

```
list(filter(lambda s: (s == s[::-1]),test))
```

**Output:**

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