''' Q1. Create a python program to sort the given list of tuples based on integer value using a lambda function.'''

In [4]:
```
l=[('Sachin Tendulkar', 34357), ('Ricky Ponting', 27483), ('Jack Kallis', 25534), (
```

In [13]:
```
sorted_1=sorted(l,key=lambda x: x[1])
```

print(sorted_1)

In [14]:
```
sorted_1
```

Out[14]:
```
[('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.'''

In [15]:
```
l1=[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
```

In [16]:
```
list(map(lambda x:x**2,l1))
```

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

'''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 [17]:
```
string=[1,2,3,4,5,6,7,8,9,10]
```

In [19]:
```
list(map(lambda x:str(x),string))
```

Out[19]:
```
['1', '2', '3', '4', '5', '6', '7', '8', '9', '10']
```

In [22]:
```
Q4. Write a python program using reduce function to compute the product of a list c
from 1 to 25.

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

In [23]:
```
product
```

Out[23]:
```
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 [24]:
```
l2=[2, 3, 6, 9, 27, 60, 90, 120, 55, 46]
```

In [28]:
```
list(filter(lambda x: x//2 and x//3,12))
```

Out[28]:
```
[3, 6, 9, 27, 60, 90, 120, 55, 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 [38]:
```
lst=['python', 'php', 'aba', 'radar', 'level']
```

In [42]:
```
lst = ['python', 'php', 'aba', 'radar', 'level']

palindromes = list(filter(lambda x: x == x[::-1], lst))

print(palindromes)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[42], line 3
      1 lst = ['python', 'php', 'aba', 'radar', 'level']
----> 3 palindromes = list(filter(lambda x: x == x[::-1], lst))
      5 print(palindromes)

TypeError: 'list' object is not callable
```

In [ ]: