Assignment_3_function

March 2, 2023

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

[4]:
```
l=[('Sachin Tendulkar', 34357), ('Ricky Ponting', 27483), ('Jack Kallis', 25534), ('Virat Kohli', 24936)]
```

[11]:
```
l.sort(key = lambda x: x[1], reverse=True)
print(l)
```

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

[ ]:
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##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]
```

[12]:
```
l2=[1,2,3,4,5,6,7,8,9,10]
```

[14]:
```
list(map(lambda x:x**2,l2))
```

[14]:
```
[1, 4, 9, 16, 25, 36, 49, 64, 81, 100]
```

[15]:
```
##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]
```

[17]:
```
l3=[1,2,3,4,5,6,7,8,9,10]
```

[27]:
```
tuple(map(lambda x:str(x),l3))
```

[27]:
```
('1', '2', '3', '4', '5', '6', '7', '8', '9', '10')
```

[ ]:
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##Q4.Write a python program using reduce function to compute the product of a list containing numbers from 1 to 25.
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[35]:
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l4=list(range(1,26))
```

[39]:
```
from functools import reduce
```

[41]:
```
reduce(lambda x,y : x*y ,l4)
```

[41]:
```
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]
```

[42]:
```
l5=[2,3,6,9,27,60,90,120,55,46]
```

[43]:
```
list(filter(lambda x : x%2==0 or x%2==0,l5 ))
```

[43]:
```
[2, 6, 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']
```

[2]:
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s=['python', 'php', 'aba', 'radar', 'level']
```

[4]:
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result = list(filter(lambda x: (x == "".join(reversed(x))), s))
print(result)
```

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

[ ]:
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