Name : Rahul Goel
Batch : CSE-O2
Reg no: RA1911030010094

EXERCISE 2 APP

1.

```
def hypotenuse(leg1,leg2):
    return (leg1**2+leg2**2)**(1/2)

print("Test number 1, triangle with legs 3 and 4, hypotenuse
is:”,hypotenuse(3,4))
print("Expected 5”)
print("Test number 1, triangle with legs 12 and 5, hypotenuse
is:”,hypotenuse(12,5))
print("Expected 13")
print("Test number 1, triangle with legs 20 and 21,
hypotenuseis:”,hypotenuse(20,21))
print("Expected 29”)
```

2.

```
from functools import reduce
  def oddTimes(input):
print (reduce(lambda a, b: a ^ b, input))
  if __name__ == "__main__":
    input = [1, 2, 3, 2, 3, 1, 3]
    oddTimes(input)
```

3.

```
  from datetime import date
  f_date = date(2018, 12, 13)
  l_date = date(2019, 2, 25)
  delta = l_date - f_date
  print(delta.days)
```

4.(a)

```
  ini_tuple = [('b', 100), ('c', 200), ('c', 45),
                          ('d', 876), ('e', 75)]
  print("intial_list", str(ini_tuple))
  result = [i for i in ini_tuple if i[1] <= 100]
  print ("Resultant tuple list: ", str(result))
```

4.(b)

```
def removeDuplicates(lst):

return [t for t in (set(tuple(i) for i in lst))]
lst = [(1, 2), (5, 7), (3, 6), (1, 2)]
print(removeDuplicates(lst))
```

5.

```
 def secondFrequent(input):
    from collections import Counter
    c = Counter(input)
    print(c.most_common()[1][0])
    input = ['aaa','bbb','ccc','bbb','aaa','aaa']
    secondFrequent(input)
```