Syllogistek
Systems Private Limited

Assignment – Day 6

1. Create an add function that is agnostic to number of inputs
Example:
My_Custom_Add(1,2,3,4,5)
Output: 15 ***[Marks: 2]***

2. Accept two sequence of number, one for distance another for time and return a list of speeds

Example:
Input Format:

- 10 20 30 40 50
- 1 5 3 2 4

Output format
[10.0, 4.0, 10.0, 20.0, 12.5] ***[Marks: 2]***

3. Given a list of products, print out the name of all the products with a price higher than 10

Hint: Use Dictionary

```
products = [
    {'name': 'orange', 'price': 20},
    {'name': 'apple', 'price': 8},
    {'name': 'banana', 'price': 10},
    {'name': 'kiwi', 'price': 30}
    ]
```

[Marks: 3]

4. Given students and their marks in following format calculate average marks for every subject

```
#Note - some of the marks are None, that is student did not appear for the exam and that shld be excluded from average calculation
student ={'A': {'PHY': 88, 'CHEM': 71, 'MATH': 88},
          'B': {'PHY': 52, 'CHEM': 99, 'MATH': 21},
          'C': {'PHY': 56, 'CHEM': 59, 'MATH': 28},
          'D': {'PHY': 15, 'CHEM': 61, 'MATH': 79},
          'E': {'PHY': 18, 'CHEM': 61, 'MATH': 82},
          'F': {'PHY': 41, 'CHEM': 70, 'MATH': 59},
          'G': {'PHY': None, 'CHEM': 61, 'MATH': 54},
          'H': {'PHY': 71, 'CHEM': None, 'MATH': 10},
          'I': {'PHY': 65, 'CHEM': 9, 'MATH': 65},
          'J': {'PHY': 69, 'CHEM': 39, 'MATH': 75},
          'K': {'PHY': 92, 'CHEM': 11, 'MATH': None},
          'L': {'PHY': None, 'CHEM': None, 'MATH': None}
          }
#Output
          # Average PHY Marks : 56.7
          # Average CHEM Marks : 54.1
          # Average MATH Marks : 56.1
```

[Marks: 4]

5. Calculate avg marks of the student

Example:

##Note - some of the marks are None that is student did not appear for the exam and that should be excluded from average calculation

```
student ={'A': {'PHY': 88, 'CHEM': 71, 'MATH': 88},
          'B': {'PHY': 52, 'CHEM': 99, 'MATH': 21},
          'C': {'PHY': 56, 'CHEM': 59, 'MATH': 28},
          'D': {'PHY': 15, 'CHEM': 61, 'MATH': 79},
          'E': {'PHY': 18, 'CHEM': 61, 'MATH': 82},
          'F': {'PHY': 41, 'CHEM': 70, 'MATH': 59},
          'G': {'PHY': None, 'CHEM': 61, 'MATH': 54},
          'H': {'PHY': 71, 'CHEM': None, 'MATH': 10},
          'I': {'PHY': 65, 'CHEM': 9, 'MATH': 65},
          'J': {'PHY': 69, 'CHEM': 39, 'MATH': 75},
          'K': {'PHY': 92, 'CHEM': 11, 'MATH': None},
          'L': {'PHY': None, 'CHEM': None, 'MATH': None}
          }
##### Output
# Avg marks of student A 82.33333333333333
# Avg marks of student B 57.333333333333336
# Avg marks of student C 47.666666666666664
# Avg marks of student D 51.666666666666664
# Avg marks of student E 53.666666666666664
# Avg marks of student F 56.666666666666664
# Avg marks of student G 57.5
# Avg marks of student H 40.5
# Avg marks of student I 46.333333333333336
# Avg marks of student J 61.0
# Avg marks of student K 51.5
# Avg marks of student L 0
```

[Marks: 5]