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In [1]: import numpy as np
import pandas as pd
```

```
In [2]: def wmean(x, w):
        return np.dot(x,w)/np.sum(w) # Ans.2
```

```
In [3]: x=np.array( [1.0, 1.2, 1.5])
w=np.array( [0.2, 0.5, 0.6])

print(wmean(x, w))
```

1.307692307692308

Ans. 1

1.31

```
In [4]: def dic_wmean(dic, w):
        s=pd.Series(dic) # Ans.3
        return wmean(s.values,w)
```

Ans.4

dic_wmean -> wmean

```
In [5]: w=np.array( [0.6, 0.1, 0.3])
print( dic_wmean({'A': 10, 'B': 2, 'C':4}, w) )
```

7.4

Ans.5

7.4

```
In [ ]:
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