

Sample Program to Illustrate User-Defined Function

Write a MATLAB program that reads a data file (sample.dat), where each line contains an employee ID and the employee's sales. For each employee, the program will do the following:

1) Calculate the commission as follows:

	<u>Commission</u>
sales <= 30,000	20% of sales
30,000 < sales	6,000 + 25% of sales in excess of 30,000

2) Calculate the withholding tax as follows:

	<u>Withholding Tax</u>
commission <= 3,000	5% of commission
3,000 < commission <= 6,000	150 + 7% of commission in excess of 3,000
6,000 < commission <= 10,000	360 + 9% of commission in excess of 6,000
10,000 < commission	720 + 12% of commission in excess of 10,000

3) Calculate the net pay as commission - withholding tax.

4) Print the ID, sales, commission, withholding tax, and net pay.

The program will also calculate and print the total, average, highest and lowest sales, commission and net pay. Call a function to calculate the totals, averages, highest values and lowest values. Name this function stats.

The output of this program should look like this:

```
ID=4832 Sales=$35764.28 Com=$ 7441.07 WT=$489.70 Net Pay=$ 6951.37
ID=3796 Sales=$15000.00 Com=$ 3000.00 WT=$150.00 Net Pay=$ 2850.00
ID=5961 Sales=$28915.93 Com=$ 5783.19 WT=$344.82 Net Pay=$ 5438.36
ID=8417 Sales=$46000.00 Com=$10000.00 WT=$720.00 Net Pay=$ 9280.00
ID=7384 Sales=$41283.76 Com=$ 8820.94 WT=$613.88 Net Pay=$ 8207.06
ID=9253 Sales=$13671.39 Com=$ 2734.28 WT=$136.71 Net Pay=$ 2597.56
ID=2675 Sales=$30000.00 Com=$ 6000.00 WT=$360.00 Net Pay=$ 5640.00
ID=1549 Sales=$51785.42 Com=$11446.36 WT=$893.56 Net Pay=$10552.79
```

```
Sales: Total=$262420.78 Average=$32802.60 Highest=$51785.42 Lowest=$13671.39
Commission: Total=$55225.83 Average=$6903.23 Highest=$11446.36 Lowest=$2734.28
Net Pay: Total=$51517.15 Average=$6439.64 Highest=$10552.79 Lowest=$2597.56
```