

## 1 Problem 1

```
clear;clc;
```

```
A = 6;
```

```
N = 13;
```

```
for k = 1:N
```

```
    B = A*k;
```

```
    fprintf('%2.0f times %1.0f is %2.0f \n',k,A,B)
```

```
end
```

## 2 Problem 2

```
clear;clc;

YPU = 90.5141202;
EPU = 00.7159221;
BPU = 00.6250000;
CPU = 01.0569998;
U = 'USD';
Y = 'Yen';
E = 'Euro';
B = 'BP';
C = 'CD';

fileID = fopen('Currency.txt','w');

fprintf(fileID,'%7s %7s %7s %7s %7s\n',U,Y,E,B,C);

for USD = 10:10:100 % Can I make this more general?
    Yen = USD*YPU;
    Euro = USD*EPU;
    BP = USD*BPU;
    CD = USD*CPU;
    fprintf(fileID,'%7.2e %7.2e %7.2e %7.2e %7.2e \n', USD, Yen, Euro, BP, CD);
end

fclose(fileID);
type currency.txt % What does this do?
```

### 3 Problem 3

```
clear;clc;

fileID = fopen('OctavilleRainfall.txt','r');
formatSpec = '%f';
Data = fscanf(fileID,formatSpec,[13,4]);
fclose(fileID);
Data = Data';
[m,n] = size(Data);

%Part 1

Years = Data(1:m,1);
N = 2:length(Data);
for k = 1:m
    Sum_Yearly_Rainfall(k) = sum(Data(k,N));
    fprintf('%d %3.1f \n',Years(k),Sum_Yearly_Rainfall(k))
end

%Space%
fprintf('\n')

%Part 2
Months = 0:12;
for i = 2:length(Data)
    Sum_Monthly_Rainfall = sum(Data(1:m,i));
    AVG_Monthly_Rainfall(i) = Sum_Monthly_Rainfall/m;
    fprintf('%-2.0f %3.1f \n',Months(i),AVG_Monthly_Rainfall(i))
end

%Space
fprintf('\n')

%Part 3

AVG_Yearly_Rainfall = Sum_Yearly_Rainfall./(n-1);
Max1 = max(AVG_Yearly_Rainfall);
[rowX,colX] = find(max(AVG_Yearly_Rainfall)); % Another way to do this?
X = Years(rowX,colX);
fprintf('%4i had the greatest average rainfall with a value of %6.4f \n'...
    ,X,Max1)

Months_Names = ['Jan';'Feb';'Mar';'Apr';'May';...
    'Jun';'Jul';'Aug';'Sep';'Oct';'Nov';'Dec'];
Max2 = max(AVG_Monthly_Rainfall);
```

```
[rowY,colY] = find(max(AVG_Monthly_Rainfall)); % Another way to do this?
Y = Months_Names(rowY,colY:end);
fprintf('%s had the greatest average rainfall with a value of %6.4f \n'...
        ,Y,Max2)

% All ... does is allow me to continue the command on the next line
```