**Write a program to find the average expenditure of a company for each month of each year, each year and average over the range of years specified. Use arrays to construct a table, display the table of expenditure and find the sum and average.**

**#include <stdio.h>**

**// header file for console input output**

**// month data type and its equivalent string**

**enum month {jan, feb, mar, apr, may, june, july, aug, oct, nov, sep, dec};**

**const char\* month[]={"jan","feb","mar","apr","may","june","july","aug","oct","nov","sep","dec"};**

**int main()**

**{**

**// Declaration of data**

**int startingYear;**

**int totalNoOfYears;**

**printf("Enter the year from which your want to start tracking expenses");**

**scanf(" %d",&startingYear);**

**printf("Enter total no of years for which your want to calcuate");**

**scanf(" %d",&totalNoOfYears);**

**// Declaration of array**

**int expMonth[totalNoOfYears][12];**

**int yearlyAvg[totalNoOfYears];**

**int monthlyAvg[] = {0,0,0,0,0,0,0,0,0,0,0,0};**

**int total= 0;**

**int i;**

**printf("Enter the expenditure for given months of the year");**

**for (i = 0;i < totalNoOfYears; i++ )**

**{**

**printf("For year %d\n",startingYear+i);**

**yearlyAvg[i] = 0;**

**enum month mon;**

**for (mon = jan; mon <= dec; mon++)**

**{**

**printf("For month: %s",month[mon]);**

**scanf(" %d",&expMonth[i][mon]);**

**yearlyAvg[i] += expMonth[i][mon];**

**monthlyAvg[mon] += expMonth[i][mon];**

**total += expMonth[i][mon];**

**}**

**printf("\n");**

**}**

**// displaying the table**

**// table header**

**enum month mon;**

**printf("year |");**

**for (mon = jan; mon <= dec; mon++)**

**{**

**printf(" %s |",month[mon]);**

**}**

**printf("Avg");**

**printf("\n");**

**// table body**

**for (i = 0; i < totalNoOfYears; i++)**

**{**

**enum month mon;**

**printf("%d |",i+startingYear);**

**for (mon = jan; mon < dec; mon++)**

**{**

**printf(" $%d |",expMonth[i][mon]);**

**}**

**printf(" $%d",yearlyAvg[i]/12);**

**printf("\n");**

**}**

**// monthly average**

**printf("Avg |");**

**for (mon = jan; mon < dec; mon++)**

**{**

**printf(" $%d |",monthlyAvg[mon]/totalNoOfYears);**

**}**

**printf("\n Total Expenditure $%d",total);**

**printf("\n Average monthly Expediture $%d",total/(totalNoOfYears\*12));**

**return 0;**

**}**

**#include<stdio.h>//or**

**#include<windows.h>**

**int main()**

**{**

**printf("Enter no of years to be added:\t");**

**int no\_of\_years;**

**scanf("%d",&no\_of\_years);**

**float finance[no\_of\_years+1][14];**

**int i,j;**

**float temp;**

**for(i=0;i<no\_of\_years;i++)**

**{**

**printf("Enter year:\t");**

**scanf("%f",&finance[i][0]);**

**temp=0;**

**for(j=0;j<12;j++)**

**{**

**switch(j)**

**{**

**case(0):**

**printf("january:\t");**

**break;**

**case(1):**

**printf("february:\t");**

**break;**

**case(2):**

**printf("March:\t");**

**break;**

**case(3):**

**printf("April:\t");**

**break;**

**case(4):**

**printf("may:\t");**

**break;**

**case(5):**

**printf("June:\t");**

**break;**

**case(6):**

**printf("July:\t");**

**break;**

**case(7):**

**printf("August:\t");**

**break;**

**case(8):**

**printf("September:\t");**

**break;**

**case(9):**

**printf("October:\t");**

**break;**

**case(10):**

**printf("November:\t");**

**break;**

**case(11):**

**printf("December:\t");**

**}**

**scanf("%f",&finance[i][j+1]);**

**temp=temp+finance[i][j+1];**

**if(j==11)**

**{**

**finance[i][j+2]=(temp/12);**

**}**

**}**

**printf("\n");**

**system("cls");**

**}**

**temp=0;**

**for(i=1;i<=12;i++)**

**{**

**for(j=0;j<no\_of\_years;j++)**

**{**

**temp=temp+finance[j][i];**

**}**

**finance[no\_of\_years][i]=temp/no\_of\_years;**

**temp=0;**

**}**

**system("cls");**

**printf("Year\tjan\tfeb\tmar\tapril\tmay\tjune\tjuly\taug\tsep\toct\tnov\tdec\tavg\n");**

**for(i=0;i<=no\_of\_years;i++)**

**{**

**if(i==no\_of\_years)**

**{**

**printf("Avg-->");**

**}**

**for(j=0;j<=13;j++)**

**{**

**if(((i==no\_of\_years)&&(j==0))|| (i==no\_of\_years)&&(j==13))**

**{**

**printf("\t");**

**continue;**

**}**

**if(j==0)**

**{**

**printf("%0.0f\t",finance[i][j]);**

**}**

**else**

**{**

**printf("%0.1f\t",finance[i][j]);**

**}**

**}**

**printf("\n");**

**}**

**}**