

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.

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#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 calculate");
    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];
        }
    }
}
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    }
    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()

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{
    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;
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        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\ttoct\tnov\tdec\tavg\n");
for(i=0;i<=no_of_years;i++)
{
    if(i==no_of_years)
    {

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```
    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");
}
```