

Retail Company Program

Function choose :

- This function to print list to choose from.

```
5. Calculate percentage share of each branch.
6. Determine the month of the peak sales.
7. Display sales of a specific month.
8. Display sales of a specific branch.
9. Done.
-----
Please choose number:
```

Function data :

- This function to collect data from user and but it in array.

```
1. Enter sales data.
2. Add a record for a new branch.
3. Delete record of an existing branch.
4. Calculate total sales.
5. Calculate percentage share of each branch.
6. Determine the month of the peak sales.
7. Display sales of a specific month.
8. Display sales of a specific branch.
9. Done.
-----
Please choose number:
1
Enter number of branches:
3
Sales for branch 1:
Sales for month 1: 275
Sales for month 2: 134
Sales for month 3: 475
Sales for month 4: 396
Sales for month 5: 246
Sales for month 6: 77
Sales for month 7: 63.5
Sales for month 8: 98
Sales for month 9: 365
Sales for month 10: 446
Sales for month 11: 491
Sales for month 12: 431
Sales for branch 2:
Sales for month 1: 218
Sales for month 2: 40
Sales for month 3: 199
Sales for month 4: 279
Sales for month 5: 325
Sales for month 6: 175
Sales for month 7: 407
Sales for month 8: 427
Sales for month 9: 471
Sales for month 10: 125
Sales for month 11: 334
Sales for month 12: 464
```

Function add :

- This function to add new branch to array.

```
7. Display sales of a specific month.
8. Display sales of a specific branch.
9. Done.
-----
Please choose number:
2
Branch 2:
Sales for month 1: 1
Sales for month 2: 1
Sales for month 3: 1
Sales for month 4: 1
Sales for month 5: 1
Sales for month 6: 1
Sales for month 7: 1
Sales for month 8: 1
Sales for month 9: 1
Sales for month 10: 1
Sales for month 11: 1
Sales for month 12: 1
-----
1 2 3 4 5 6 7 8 9 10 11 12
Branche 1:
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
-----
Branche 2:
```

Function delete :

- This function to delete branch from array.

```
-----
1. Enter sales data.
2. Add a record for a new branch.
3. Delete record of an existing branch.
4. Calculate total sales.
5. Calculate percentage share of each branch.
6. Determine the month of the peak sales.
7. Display sales of a specific month.
8. Display sales of a specific branch.
9. Done.
-----
Please choose number:
3
1  2  3  4  5  6  7  8  9  10 11 12
Branche 1:
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
1.000000
-----
1. Enter sales data.
2. Add a record for a new branch.
3. Delete record of an existing branch.
4. Calculate total sales.
5. Calculate percentage share of each branch.
6. Determine the month of the peak sales.
7. Display sales of a specific month.
8. Display sales of a specific branch.
9. Done.
-----
Please choose number:
```

Function branches total :

- This function to calculate total from all branches.

```
-----
1. Enter sales data.
2. Add a record for a new branch.
3. Delete record of an existing branch.
4. Calculate total sales.
5. Calculate percentage share of each branch.
6. Determine the month of the peak sales.
7. Display sales of a specific month.
8. Display sales of a specific branch.
9. Done.
-----
Please choose number:
4
-----
Total Company Sales = 10377.50 $
-----
```

Function percentage :

- function to calculate this equation $((\text{percent}/\text{total}) * 100)$.

```
-----
1. Enter sales data.
2. Add a record for a new branch.
3. Delete record of an existing branch.
4. Calculate total sales.
5. Calculate percentage share of each branch.
6. Determine the month of the peak sales.
7. Display sales of a specific month.
8. Display sales of a specific branch.
9. Done.
-----
Please choose number:
5
-----
branch 1: 33.3 %
-----
branch 2: 66.7 %
-----
```

Function peak sales :

- Function to calculate the largest month sales.

```
-----
1. Enter sales data.
2. Add a record for a new branch.
3. Delete record of an existing branch.
4. Calculate total sales.
5. Calculate percentage share of each branch.
6. Determine the month of the peak sales.
7. Display sales of a specific month.
8. Display sales of a specific branch.
9. Done.
-----
Please choose number:
6
-----
Month 9 has the peak sales of 1101.0
-----
```

Function sales of month :

- Function to sort the sales data of a specific month in descending order.

```
7
Input :
2
Month 2 sales :
Branch: 215.0
Branch: 134.0
Branch: 40.0
-----
1. Enter sales data.
2. Add a record for a new branch.
3. Delete record of an existing branch.
4. Calculate total sales.
5. Calculate percentage share of each branch.
6. Determine the month of the peak sales.
7. Display sales of a specific month.
8. Display sales of a specific branch.
9. Done.
-----
Please choose number:
8
Input :
2
Branch 2 sales :
Month: 471.0
Month: 464.0
Month: 427.0
Month: 407.0
Month: 334.0
Month: 325.0
Month: 279.0
Month: 218.0
Month: 199.0
Month: 175.0
Month: 125.0
Month: 40.0
-----
```

Function sales of branch :

- Function to sort the sales data of a specific branch in descending order.

```
1. Enter sales data.
2. Add a record for a new branch.
3. Delete record of an existing branch.
4. Calculate total sales.
5. Calculate percentage share of each branch.
6. Determine the month of the peak sales.
7. Display sales of a specific month.
8. Display sales of a specific branch.
9. Done.
-----
Please choose number:
8
Input :
2
Branch 2 sales :
Month: 471.0
Month: 464.0
Month: 427.0
Month: 407.0
Month: 334.0
Month: 325.0
Month: 279.0
Month: 218.0
Month: 199.0
Month: 175.0
Month: 125.0
Month: 40.0
-----
```

Function backup :

- Function to make a copy of the sales array in order to use it in the sorting functions and to keep backup of the original sales data.

```
float backup(){
    int i,j;
    sort = malloc(branch_numbers*sizeof(float*));

    for (i=0 ; i < 12 ; i++)
    {
        sort[i] = malloc(12*sizeof(float*));
    }

    for (i=0 ; i < branch_numbers ; i++)
    {
        for (j=0 ; j < 12 ; j++)
        {
            sort[i][j]=sales[i][j];
        }
    }
    return 0;
}
```

Notes :

- To end the program you must insert number (0).

To conclude this program helps the retail company owner to compute many calculations easily such as calculating total sales, Calculating share of each branch and sorting sales data.