**Assignment 01 Using Type 1**

#include <stdio.h>

void tempConvert();

void areaAndPerimetere();

void sumOfDigitAndReverse();

void evenOdd();

void salary();

void marriageEligibility();

void circumference();

void areaofCircle();

void perimeter();

void areaofRect();

void main()

{

    int ch = 1;

    while (ch)

    {

        printf("\n Eneter your choice : \n");

        printf("1) Temp Convert: \n");

        printf("2) Area And Perimeter: \n");

        printf("3) Sum Of Digits and Reverse: \n");

        printf("4) Even Odd : \n");

        printf("5) Salary: \n");

        printf("6) Marriage Eligibility: \n");

        printf("0) Enter zero to exit: \n");

        scanf("%d", &ch);

        if (ch > 6 || ch <= 0)

        {

            printf("Inavalid Choice !");

        }

        else if (ch == 1)

        {

            tempConvert();

        }

        else if (ch == 2)

        {

            areaAndPerimetere();

        }

        else if (ch == 3)

        {

            sumOfDigitAndReverse();

        }

        else if (ch == 4)

        {

            evenOdd();

        }

        else if (ch == 5)

        {

            salary();

        }

        else if (ch == 6)

        {

            marriageEligibility();

        }

    }

}

void tempConvert()

{

    int CL = 010;

    float fr = (9.0 / 5.0) \* CL + 32;

    printf("Temparature In Celcius is :%d \n", CL);

    printf("Temparature In Feranhite is :%f", fr);

}

void areaAndPerimetere()

{

    areaofCircle();

    printf("\n");

    areaofRect();

    printf("\n");

    perimeter();

    printf("\n");

    circumference();

}

void areaofCircle()

{

    const float PI = 3.14;

    float radious = 9.0;

    float areaOfCir = PI \* (radious \* radious);

    printf("%f is area of circle", areaOfCir);

}

void areaofRect()

{

    int L = 15, W = 45;

    int areaOfRect = L \* W;

    printf("%d is area of rect", areaOfRect);

}

void perimeter()

{

    int L = 15, W = 45;

    int areaOfRect = L \* W;

    int periMeter = 2 \* (L + W);

    printf("\n %d is perimeter of Reactangle. \n ", periMeter);

}

void circumference()

{

    const float PI = 3.14;

    float radious = 9.0;

    float Circumfer = 2.0 \* PI \* radious;

    printf("\n %f is circumference \n", Circumfer);

}

void sumOfDigitAndReverse()

{

    int num = 234;

    int sum = 0;

    int rev = 0;

    int r1 = num % 10;

    int q1 = num / 10;

    sum += r1;

    rev = (rev \* 10) + r1;

    r1 = q1 % 10;

    q1 /= 10;

    rev = (rev \* 10) + r1;

    sum += r1;

    r1 = q1 % 10;

    q1 /= 10;

    rev = (rev \* 10) + r1;

    sum += r1;

    printf("Sum of %d digits is: %d \n Also Reverse of num: %d", num, sum, rev);

}

void evenOdd()

{

    int num = 7;

    if (num % 2 == 0)

    {

        printf("Number is even \n");

    }

    else

    {

        printf("Number is odd \n");

    }

}

void salary()

{

    float baseSalary = 7777.0, totalSalary;

    float DA, TA, HRA;

    if (baseSalary <= 5000)

    {

        DA = 0.10 \* baseSalary;

        TA = 0.20 \* baseSalary;

        HRA = 0.25 \* baseSalary;

    }

    else

    {

        DA = 0.15 \* baseSalary;

        TA = 0.25 \* baseSalary;

        HRA = 0.30 \* baseSalary;

    }

    totalSalary = DA + TA + HRA + baseSalary;

    printf("%f is total salary.", totalSalary);

}

void marriageEligibility()

{

    int maleAge = 25, femaleAge = 29;

    char gender = 'f';

    if (gender == 'f' && femaleAge >= 18 || gender == 'm' && maleAge >= 21)

    {

        printf("Eligible to marry");

    }

    else

    {

        printf("Not Eligible to marry");

    }

}

Output :

PS C:\Code> & 'c:\Users\bhagv\.vscode\.......\TDM-GCC-64\bin\gdb.exe' '--interpreter=mi'

Eneter your choice :

1) Temp Convert:

2) Area And Perimeter:

3) Sum Of Digits and Reverse:

4) Even Odd :

5) Salary:

6) Marriage Eligibility:

0) Enter zero to exit:

1

Temparature In Celcius is :8

Temparature In Feranhite is :46.400002

Eneter your choice :

1) Temp Convert:

2) Area And Perimeter:

3) Sum Of Digits and Reverse:

4) Even Odd :

5) Salary:

6) Marriage Eligibility:

0) Enter zero to exit:

2

254.340012 is area of circle

675 is area of rect

120 is perimeter of Reactangle.

56.520000 is circumference

Eneter your choice :

1) Temp Convert:

2) Area And Perimeter:

3) Sum Of Digits and Reverse:

4) Even Odd :

5) Salary:

6) Marriage Eligibility:

0) Enter zero to exit:

3

Sum of 234 digits is: 9

Also Reverse of num: 432

Eneter your choice :

1) Temp Convert:

2) Area And Perimeter:

3) Sum Of Digits and Reverse:

4) Even Odd :

5) Salary:

6) Marriage Eligibility:

0) Enter zero to exit:

4

Number is odd

Eneter your choice :

1) Temp Convert:

2) Area And Perimeter:

3) Sum Of Digits and Reverse:

4) Even Odd :

5) Salary:

6) Marriage Eligibility:

0) Enter zero to exit:

5

13220.900391 is total salary.

Eneter your choice :

1) Temp Convert:

2) Area And Perimeter:

3) Sum Of Digits and Reverse:

4) Even Odd :

5) Salary:

6) Marriage Eligibility:

0) Enter zero to exit:

6

Eligible to marry

Eneter your choice :

1) Temp Convert:

2) Area And Perimeter:

3) Sum Of Digits and Reverse:

4) Even Odd :

5) Salary:

6) Marriage Eligibility:

0) Enter zero to exit:

0

Inavalid Choice !

PS C:\Code>