**Assignment 01 Using Type 3**

#include <stdio.h>

void tempConvert(int);

void evenOdd(int);

void areaAndPerimetere();

void circumference(float);

void areaofCircle(float);

void areaofRect(int, int);

void perimeter(int, int);

void sumOfDigitAndReverse();

void sumOfDigits(int);

void reverseNum(int);

void salary(float);

void marriageEligibility();

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");

        scanf("%d", &ch);

        if (ch > 6 || ch <= 0)

        {

            printf("Inavalid Choice !");

        }

        else if (ch == 1)

        {

            int cel;

            printf("Enter Teperature in Celcious.");

            scanf("%d", &cel);

            tempConvert(cel);

        }

        else if (ch == 2)

        {

            areaAndPerimetere();

        }

        else if (ch == 3)

        {

            sumOfDigitAndReverse();

        }

        else if (ch == 4)

        {

            int num;

            printf("Enter A Number : \n");

            scanf("%d", &num);

            evenOdd(num);

        }

        else if (ch == 5)

        {

            float baseSalary, totalSalary;

            printf("\n Enter Base Salary :  \n");

            scanf("%f", &baseSalary);

            salary(baseSalary);

        }

        else if (ch == 6)

        {

            marriageEligibility();

        }

    }

}

void tempConvert(int CL)

{

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

    printf("Temparature In feranhite is :%.2f \n", fr);

}

void areaAndPerimetere()

{

    printf("What do you want to do brooo. \n");

    int ch;

    printf("1> Area of Circle\n");

    printf("2> Area of Reactangle\n");

    printf("3> Perimeter of Reactangle \n");

    printf("4> Circumference of Circle\n");

    scanf("%d", &ch);

    if (ch == 0 || ch > 4 || ch < 0)

    {

        printf("Invalid Choice broooo!!!");

    }

    else if (ch == 1)

    {

        float rad;

        printf("Enter Radious of Circle");

        scanf("%f", &rad);

        areaofCircle(rad);

    }

    else if (ch == 2)

    {

        printf("\n");

        int L, W;

        printf("\n Enter Length and Width of Reactangle : \n");

        scanf("%d%d", &L, &W);

        areaofRect(L, W);

    }

    else if (ch == 3)

    {

    }

    else if (ch == 4)

    {

        float rad;

        printf("Enter Radious of Circle");

        scanf("%f", &rad);

        circumference(rad);

    }

}

void areaofCircle(float rad)

{

    const float PI = 3.14;

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

    printf("\n %.2f is area of Circle. \n", areaOfCir);

}

void circumference(float rad)

{

    const float PI = 3.14;

    float Circumfer = 2.0 \* PI \* rad;

    printf("\n %f is circumference of the circle.", Circumfer);

}

void areaofRect(int L, int W)

{

    printf("%d is area of Rectangle: ", L \* W);

}

void perimeter(int L, int W)

{

    printf("\n %d is perimeter of Rectangle. \n", (2 \* (L + W)));

}

void sumOfDigitAndReverse()

{

    printf("What do you Whant to do : \n");

    printf("1> Sum Of Digits of number: \n");

    printf("2> Reverse the number : \n");

    int ch, num;

    scanf("%d", &ch);

    printf("Enter a Number : \n");

    scanf("%d", &num);

    if (ch == 1)

    {

        sumOfDigits(num);

    }

    else if (ch == 2)

    {

        reverseNum(num);

    }

    else

    {

        printf("Invalid Choice brooo!! \n");

    }

}

void sumOfDigits(int num)

{

    int sum = 0;

    for (num; num > 0; num /= 10)

    {

        sum += (num % 10);

    }

    printf("\n %d is A Sum Of digits of number. \n", sum);

}

void reverseNum(int num)

{

    int rev = 0;

    for (num; num > 0; num /= 10)

    {

        rev = (rev \* 10) + (num % 10);

    }

    printf("\n %d is Reverse Number. \n", rev);

}

void evenOdd(int num)

{

    if (num % 2 == 0)

    {

        printf("\n Number is Even! \n");

    }

    else

    {

        printf("\n Number is odd! \n");

    }

}

void salary(float baseSalary)

{

    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;

    }

    printf("\n %.4f is your Total Salary \n", (DA + TA + HRA + baseSalary));

}

void marriageEligibility()

{

    int maleAge, femaleAge;

    char gender;

    printf("\n Enter Your Gender (f/m): ");

    fflush(stdin);

    scanf("%c", &gender);

    if (gender == 'm')

    {

        printf("\n Enter age of male: \n");

        scanf("%d", &maleAge);

    }

    else if (gender == 'f')

    {

        printf("\n Enter age of Female: \n");

        scanf("%d", &femaleAge);

    }

    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:

1

Enter Teperature in Celcious.23

Temparature In feranhite is :73.40

Eneter your choice :

1) Temp Convert:

2) Area And Perimeter:

3) Sum Of Digits and Reverse:

4) Even Odd :

5) Salary:

6) Marriage Eligibility:

2

What do you want to do brooo.

1> Area of Circle

2> Area of Reactangle

3> Perimeter of Reactangle

4> Circumference of Circle

2

Enter Length and Width of Reactangle :

12

2

24 is area of Rectangle:

Eneter your choice :

1) Temp Convert:

2) Area And Perimeter:

3) Sum Of Digits and Reverse:

4) Even Odd :

5) Salary:

6) Marriage Eligibility:

3

What do you Whant to do :

1> Sum Of Digits of number:

2> Reverse the number :

2

Enter a Number :

987654321

123456789 is Reverse Number.

Eneter your choice :

1) Temp Convert:

2) Area And Perimeter:

3) Sum Of Digits and Reverse:

4) Even Odd :

5) Salary:

6) Marriage Eligibility:

4

Enter A Number :

12

Number is Even!

Eneter your choice :

1) Temp Convert:

2) Area And Perimeter:

3) Sum Of Digits and Reverse:

4) Even Odd :

5) Salary:

6) Marriage Eligibility:

5

Enter Base Salary :

55550

94435.0000 is your 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:

6

Enter Your Gender (f/m): f

Enter age of Female:

29

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

Inavalid Choice !

PS C:\Code>