**Assignment 1**

**// 1. Finding F from C (temp).**

#include <stdio.h>

int main() {

    double celsius, fahrenheit;

    printf("Enter temperature in Celsius: ");

    scanf("%lf", &celsius);

    fahrenheit = (celsius \* 9 / 5) + 32;

    printf("Temperature in Fahrenheit: %.2lf°F\n", fahrenheit);

    return 0;

}

**// 2. Finding area and perimeter of rectangle or circle.**

#include <stdio.h>

void main() {

    int choice, length, width, radius;

    printf("Select the no find the area and perimeter\n");

    printf("1) Rectangle \n2) Circle\n");

    scanf("%d", &choice);

    if (choice == 1){

        printf("Enter the length: ");

        scanf("%d", &length);

        printf("Enter the width: ");

        scanf("%d", &width);

        int area = length \* width;

        int perimeter = 2 \* (length + width);

        printf("The area of a rectangle is: %d \nThe perimete of a rectangle is %d", area, perimeter);

    } else if (choice == 2){

        int pai = 3.14;

        printf("Enter the radius: ");

        scanf("%d", &radius);

        int area = pai \* (radius  \* radius);

        int perimeter = 2 \* pai \* radius;

        printf("The area of a circle is: %d \nThe perimete of a circle is %d", area, perimeter);

    } else {

        printf("Invalid Choice");

    }

}

**// 3. Accept a 3 digit number from user and find the sum of the digits and also reverse the number**

#include <stdio.h>

void main() {

    int no, n1, n2, n3, sum;

    printf("Enter the no: ");

    scanf("%d", &no);

    if (no > 99 && no < 1000) {

        printf("Your no %d is accepted\n", no);

        n1 = no / 100;

        no = no % 100;

        n2 = no / 10;

        no = no % 10;

        n3 = no;

        printf("\nno1: %d \nno2: %d \nno3: %d\n", n1, n2, n3);

        sum = n1 + n2 + n3;

        printf("the sum of digit is: %d\n", sum);

        printf("\n%d\n%d\n%d\n", n3, n2, n1);

    } else {

        printf("the no is not three digit ");

    }

}

**// 4. Check if the given number is even or odd.**

#include <stdio.h>

void main() {

    int no;

    printf("Enter the no check even or odd: ");

    scanf("%d", &no);

    if (no % 2 == 0) {

        printf("Your no %d is even", no);

    } else {

        printf("Your no %d is odd", no);

    }

}

**// 5. Calculating total salary based on basic. If basic <=5000 da, ta and hra will be 10%,20% and 25% respectively otherwise da, ta and hra will be 15%,25% and 30% respectively.**

#include <stdio.h>

int main() {

    double basic, da, ta, hra, totalSalary;

    printf("Enter Basic Salary: ");

    scanf("%lf", &basic);

    if (basic <= 5000) {

        da = basic \* 0.10;

        ta = basic \* 0.20;

        hra = basic \* 0.25;

    } else {

        da = basic \* 0.15;

        ta = basic \* 0.25;

        hra = basic \* 0.30;

    }

    totalSalary = basic + da + ta + hra;

    printf("Total Salary: %.2lf\n", totalSalary);

    return 0;

}

**// 6. Write a program to check if person is eligible to marry or not (male age >=21 and female age>=18).**

#include <stdio.h>

void main() {

    int male, female;

    printf("Enter the male age: ");

    scanf("%d", &male);

    printf("Enter the female age: ");

    scanf("%d", &female);

    if (male > 21) {

        printf("Male is eligible for marriage\n");

    } else {

        printf("Male not eligible\n");

    }

    if (female > 18) {

        printf("Female is eligible for marriage\n");

    } else {

        printf("Female not eligible\n");

    }

}