EXERCISE 1

Task-1

```c
#include <stdio.h>

int main() {
    int emp_id;                  // Employee ki ID store karne ke liye variable
    float hours, rate, salary;

    printf("Enter Employee ID: ");
    scanf("%d", &emp_id);   //take user id

    printf("Enter total worked hours in a month: ");
    scanf("%f", &hours);

    printf("Enter amount received per hour: ");
    scanf("%f", &rate);

    salary = hours * rate; // forumula for salary

    printf("Employee ID: %d\n", emp_id);
    printf("Salary: %.2f\n", salary);  // 2 decimal places tak show karna

    return 0;
}
```

```
PS C:\Users\NB\Desktop\cewTSKS> cd "c:\Users\NB\Desktop\cewTSKS\lab1\" ; if ($?) { g++ task1.cpp -o t
ask1 } ; if ($?) { .\task1 }
Enter Employee ID: 55
Enter total worked hours in a month: 15
Enter amount received per hour: 25
Employee ID: 55
Salary: 375.00
```

Task-2

```c
#include <stdio.h>

int main() {
    float height, width, perimeter, area;
```

```
    printf("Enter height of rectangle: ");
    scanf("%f", &height);

    printf("Enter width of rectangle: ");
    scanf("%f", &width);

    perimeter = 2 * (height + width); // Formula: 2*(L+W)
    area = height * width;            // Formula: L*W

    printf("Perimeter of rectangle = %.2f\n", perimeter);
    printf("Area of rectangle = %.2f\n", area);

    return 0;
}
```

```
● PS C:\Users\NB\Desktop\cewTSKS\lab1> cd "c:\Users\NB\Desktop\cewTSKS\lab1\" ; if ($?) { g++ task2.cpp
  -o task2 } ; if ($?) { .\task2 }
  Enter height of rectangle: 5.5
  Enter width of rectangle: 2.5
  Perimeter of rectangle = 16.00
  Area of rectangle = 13.75
○ PS C:\Users\NB\Desktop\cewTSKS\lab1> ▮
```

Task-3

```
#include <stdio.h>

// height ke hisab se bona chota khaba btatahe 🎧
int main() {
    int height;

    printf("Enter height of person in cm: ");
    scanf("%d", &height);

    if (height < 150) {
        printf("Person is Dwarf\n");    // Agar 150 se choti hai
    } else if (height == 150) {
        printf("Person is Average\n"); // Agar 150 ke barabar hai
    } else if (height >= 165) {
        printf("Person is Tall\n");     // Agar 165 ya usse zyada hai
    } else {
        printf("Person is between Average and Tall\n"); // Agar 151-164 ke
darmiyan hai
    }
```

```
    return 0;
}
```

```
● PS C:\Users\NB\Desktop\cewTSKS\lab1> cd "c:\Users\NB\Desktop\cewTSKS\lab1\" ; if ($?) { g++ task3.cpp
   -o task3 } ; if ($?) { .\task3 }
  Enter height of person in cm: 167
  Person is Tall
○ PS C:\Users\NB\Desktop\cewTSKS\lab1> oho me tall hun
```

Task-4

```c
#include <stdio.h>

// dsa me kia wa he apne
void decToBinary(int n) {
    if (n > 1) {
        decToBinary(n / 2);   // Baar baar divide karke recursive call dsa me
backtracking ki trah
    }
    printf("%d", n % 2);      // Remainder print karna (0 ya 1)
}

int main() {
    int num;
    printf("Enter a decimal number: ");
    scanf("%d", &num);

    printf("Binary: ");
    decToBinary(num);   // Function call
    printf("\n");

    return 0;
}
```

```
PS C:\Users\NB\Desktop\cewTSKS\lab1> cd "c:\Users\NB\Desktop\cewTSKS\lab1\" ; if ($?) { g++ task4.cpp
   -o task4 } ; if ($?) { .\task4 }
Enter a decimal number: 12
Binary: 1100
PS C:\Users\NB\Desktop\cewTSKS\lab1>
```

Task-5

```c
#include <stdio.h>
// eaji piji
int fibonacci(int n) {
    if (n == 0) return 0; // Base case
    if (n == 1) return 1; // Base case
    return fibonacci(n - 1) + fibonacci(n - 2);}

int main() {
    int n;
    printf("Enter how many Fibonacci numbers to print: ");
    scanf("%d", &n);

    printf("Fibonacci Series: ");
    for (int i = 0; i < n; i++) {
        printf("%d ", fibonacci(i));
    }
    printf("\n");

    return 0;
}
```

```
PS C:\Users\NB\Desktop\cewTSKS\lab1> cd "c:\Users\NB\Desktop\cewTSKS\lab1\" ; if ($?) { g++ task5.cpp
 -o task5 } ; if ($?) { .\task5 }
Enter how many Fibonacci numbers to print: 12
Fibonacci Series: 0 1 1 2 3 5 8 13 21 34 55 89
PS C:\Users\NB\Desktop\cewTSKS\lab1>
```
powershell
Code lab1