Day 2
Ans 1-

```
int[] attendance = {1,0,1,0,0};
int sumOfDays = attendance.Length;
int presentDays = 0;

foreach(int day in attendance)
{
   presentDays +=day;
}

double percentage = ((double)presentDays/totalDays)*100;
int finalPercentage = (int)Math.round(percentage);

Console.WriteLine("Ateendance Program " + finalPercentage);

if (finalPercentage >= 75)
{
   Console.WriteLine("Eligible");
}
else
{
   Console.WriteLine("Not Eligible");
}
```

Ans 2 -

```
int[] marks = {100,50,17,60,45};
int totalStudents = attendance.Length;
int presentSum = 0;

foreach(int s in marks)
{
   presenSum += s;
}
double average = ((double)presentSum/totalStudents);
Console.WriteLine($"average marks are:{average:F2} ");

int scholarshipScore_1 = (int)average; // precision loss
int scholarshipScore_2 = (int)Math.round(average);
```

Ans 3 -

```
decimal finePerDay = 15.75m;
int daysOverdue = 5;

decimal fine = finePerDay * daysOverdue;

Console.WriteLine($"Total fine: {fine}");
double loggedFine = ((double)fine);
```

Ans 4-

```
decimal accountBalance = 10000.00m;

        float annualInterestRate= 7.4f;

        decimal interestRateDecimal =(decimal)annualInterestRate;

        decimal monthlyInterest =
            accountBalance *(interestRateDecimal / 100) / 12;

        accountBalance += monthlyInterest;

        Console.WriteLine($"Monthly Interest: {monthlyInterest}");
        Console.WriteLine($"Updated Balance: {accountBalance}");
```

Ans 5 -

```
double cartTotal = 199.99;


        decimal preciseTotal = (decimal)cartTotal;

        decimal taxRate = 18m;
        decimal discountRate = 10m;

        decimal tax = preciseTotal * taxRate / 100;
        decimal discount = preciseTotal * discountRate / 100;

        decimal finalPayable = preciseTotal + tax - discount;

        Console.WriteLine($"Final Amount: ₹{finalPayable}");
```

Ans 6-

```
short[] sensorReadings = { 235, 240, 238, 242, 237 };

        double total = 0.0;

        foreach (short reading in sensorReadings)
        {
            double tempCelsius = reading / 10.0;

            total += tempCelsius;
        }

        double averageTemp = total / sensorReadings.Length;

        int displayTemp = (int)Math.Round(averageTemp);

        Console.WriteLine($"Average Temperature: {averageTemp:F2} °C");
        Console.WriteLine($"Dashboard Display: {displayTemp} °C");
```

Ans 7-

```
using System;

class Program
{
   static void Main()
   {
      double finalScore = 80;
      byte grades = CalculateGrade(finalScore);
      Console.WriteLine($"Grade Code: {grades}");
   }
   static byte CalculateGrade(double score)
   {
      if (score >= 90) {
         return 1;}
      if (score >= 80) return 2;
      if (score >= 70) return 3;
      if (score >= 60) return 4;
      return 5;
   }
}
```

Ans 8-

```
static void Main()
   {
      long usageByte = 2346543;
      double usageMB = usageBytes /(1024.0 * 1024);
      double usageGB = usageBytes /(1024.0*1024 * 1024);


      Console.WriteLine($"Usage in MB : {usageMB:F2} ");
      Console.WriteLine($"Usage in GB : {usageGB:F2} ");
      int roundedGB = (int)Math.Round(usageGB);

      Console.WriteLine($"Monthly Summary: {roundedGB} GB");
   }
```

Ans 9-

```
static void Main()
   {
      int count = 30;
      ushort maxCapacity = 100;

      int maxCap = ((int)maxCapacity);

      if(count< maxCapacity)
      {
         Console.WriteLine("capcity in limit ");
      }
      else
```

```
        {
            Console.WriteLine("capacity exceeded ");
        }

    }
```
Ans 10-
```
static void Main()
    {
        int basicSalary = 30000;
        double deductions = 3600.87;
        double allowances = 2500.56;

        decimal deduction = (decimal)deductions;
        decimal allowance = (decimal)allowances;
        decimal basicS = (decimal)basicSalary;

        decimal netSalary = basicS + allowance + deduction;
        Console.WriteLine(netSalary);

    }
```