Solutions:

1. To Print Prime Numbers

```
C:\Program Files\dotnet\dotnet.exe
Hi! Choose from the following operations:
1: Print Prime Numbers
2: Get series result
3: Decimal to Binary conversion
4: Binary to Decimal Conversion
5: Print Star Triange
6: Compute frequency in an array
7: Exit
You have chosen to print prime numbers between 2 integers
Please input the value of X:
Please input the value of Y:
Find all prime numbers between 2 integers X and Y:
The prime numbers between 5 and 15 are :
5 7 11 13
Press any key to exit the program ...
```

2. To Get Series Result:

C:\Program Files\dotnet\dotnet.exe

```
Hi! Choose from the following operations:

1: Print Prime Numbers

2: Get series result

3: Decimal to Binary conversion

4: Binary to Decimal Conversion

5: Print Star Triange

6: Compute frequency in an array

7: Exit

2

You have chosen to get series result for N

Input the number N:

5

The result of the series is 0.617

Press any key to exit the program ...
```

- 3. To Convert Decimal to Binary numbers:
 - C:\Program Files\dotnet\dotnet.exe

```
Hi! Choose from the following operations:

1: Print Prime Numbers

2: Get series result

3: Decimal to Binary conversion

4: Binary to Decimal Conversion

5: Print Star Triange

6: Compute frequency in an array

7: Exit

3

You have chosen to convert the decimal to binary for N

Input the number N:

15

The Binary format for given number is 1111

Press any key to exit the program ...
```

4. To Convert Binary to Decimal numbers

C:\Program Files\dotnet\dotnet.exe

```
Hi! Choose from the following operations:

1: Print Prime Numbers

2: Get series result

3: Decimal to Binary conversion

4: Binary to Decimal Conversion

5: Print Star Triange

6: Compute frequency in an array

7: Exit

4

You have chosen to convert the binary to Decimal for N

Enter a Binary Number(1s and 0s) : 1111

The Binary Number is : 1111

Its Decimal Equivalent is : 15

Press any key to exit the program ...
```

5. To Print Triangle:

C:\Program Files\dotnet\dotnet.exe

6. To Compute frequency of the elements in the Array:

```
C:\Program Files\dotnet\dotnet.exe
1: Print Prime Numbers
2: Get series result
3: Decimal to Binary conversion4: Binary to Decimal Conversion
5: Print Star Triange
6: Compute frequency in an array
7: Exit
You have chosen to compute the frequency of elements in the array
Input the number of elements to be stored in the array :8
Input 8 elements in the array :
element - 1 : 1
element - 2 : 2
element - 3 : 3
element - 4 : 2
element - 5 : 2
element - 6 : 1
element - 7 : 3
element - 8 : 2
The frequency of all elements of the array :
Number Frequency
Number Frequency
  2
Number Frequency
Press any key to exit the program ...
```

Yagna Dheepika Venkitasamy

7. To Exit the program:

C:\Program Files\dotnet\dotnet.exe

```
Hi! Choose from the following operations:

1: Print Prime Numbers

2: Get series result

3: Decimal to Binary conversion

4: Binary to Decimal Conversion

5: Print Star Triange

6: Compute frequency in an array

7: Exit

7

Now exiting the console..!

Press any key to exit the program ...
```