

```

1 using System;
2
3 namespace Discrete
4 {
5     public static class Program
6     {
7         public static void Main()
8         {
9
10             Console.WriteLine("### Project 1 ###");
11             Console.WriteLine();
12
13             //num1 is the first input number
14             //num2 is the second input number
15             int num1, num2, i, j;
16
17             Console.WriteLine("Enter the first number, please");
18             num1 = int.Parse(Console.ReadLine());
19
20             Console.WriteLine("Enter the second number, please");
21             num2 = int.Parse(Console.ReadLine());
22
23             Console.WriteLine("-----*-----*-----*-----*");
24
25             Console.WriteLine("The prime numbers are:");
26
27             //i represent the numbers from the first number to the second number by adding 1 each time.
28             for (i = num1; i <= num2; i++)
29             {
30                 //j represents the numbers that will be divided on
31                 for (j = 2; j <= i; j++)
32                 {
33                     if (i % j == 0)
34                     {
35                         break;
36                     }
37                 }
38
39                 if (i == j)
40                 {
41                     Console.WriteLine(j);
42                 }
43             }
44
45             Console.WriteLine();
46             Console.WriteLine();
47             Console.WriteLine();
48             Console.WriteLine("### Project 2 ###");
49             Console.WriteLine();
50
51             //n1 is the first input number
52             //n2 is the second input number
53             int n1, n2, sum, ii, jj;
54
55             Console.WriteLine("Enter the first number, please");
56             n1 = int.Parse(Console.ReadLine());
57
58             Console.WriteLine("Enter the second number, please");
59             n2 = int.Parse(Console.ReadLine());
60
61             Console.WriteLine("-----*-----*-----*-----*");
62
63             Console.WriteLine("The perfect numbers are:");
64
65             //ii represents the numbers from n1 to n2 by increasing 1 each time
66             for (ii = n1; ii <= n2; ii++)
67             {
68                 sum = 0;
69
70                 //jj represents the numbers from 1 to ii by adding 1 each time
71                 for (jj = 1; jj < ii; jj++)
72                 {
73                     if (ii % jj == 0)
74                     {
75                         sum = sum + jj;
76                     }
77                 }
78
79                 if (ii == sum)
80                 {
81                     Console.WriteLine(ii);
82                 }
83             }
84
85             }
86     }
87 }
88
89 }
90
91 }
92
93 }
94
95 }
96
97 }
98
99 }

```