```cs
using System;
using System.Collections.Generic;
using System.Linq;
using System.Runtime.CompilerServices;
using System.Text;
using System.Threading.Tasks;

namespace AssignPractice
{
    class Practice
    {
        //datatypes

        //integer
        int a = 23;
        int b = 16;

        //float
        float m = 2.365f;
        float x = 2.0365f;

        //decimal
        decimal number = 2.45698m;

        //boolean
        bool p = false;
        bool q = true;

        //string
        string test = "test";
        string samarth = "samarth";

        //character
        char A;
        char B;

        static void Main()
        {
            // Variables
            int a = 45;
            int b = 79;

            //operators

            //Arithmatic operators
            Console.WriteLine("Arithmatic operators");
            Console.WriteLine($"Addition :{a + b}");
            Console.WriteLine($"Substraction :{a - b}");
            Console.WriteLine($"Multiplication :{a * b}");
```

```
50              Console.WriteLine($"Division : {a / b}");
51              Console.WriteLine($"Mod :{a % b}");
52
53              //Comparision operators /relational operators
54              Console.WriteLine("Comparision operators");
55              Console.WriteLine($"a==b :{a == b}");
56              Console.WriteLine($"a!=b :{a != b}");
57              Console.WriteLine($"a>b :{a > b}");
58              Console.WriteLine($"a<b :{a < b}");
59              Console.WriteLine($"a>=b :{a >= b}");
60              Console.WriteLine($"a<=b :{a <= b}");
61
62              //logical operators
63              bool x = true;
64              bool y = false;
65              Console.WriteLine("Logical operators");
66              Console.WriteLine($"x&&y : {x && y}");
67              Console.WriteLine($"x||y : {x || y}");
68              Console.WriteLine($"!x : {!x}");
69
70
71
72              //controlstatement
73
74              //if statement
75
76              int number = 16;
77
78              if (number == 19)
79              {
80                  Console.WriteLine("The number is positive");
81              }
82
83              //if else statement
84
85              string name = "manjiri";
86
87              if (name == "manjiri2")
88              {
89                  Console.WriteLine(" This is Active name");
90              }
91              else
92              {
93                  Console.WriteLine("This is invalid name");
94              }
95
96              //if else if else statement
97
98              int numberrow = 45;
```

```
 99              if (numberrow > 0)
100              {
101                  Console.WriteLine("The number is positive");
102              }
103              else if (numberrow < 0)
104              {
105                  Console.WriteLine("The number is negative");
106              }
107              else if (numberrow == 0)
108              {
109                  Console.WriteLine("The number is zero");
110
111              }
112              else
113              {
114                  Console.WriteLine("The number is below 100");
115              }
116
117              // switch statement
118
119              int Month = 8;
120              switch (Month)
121              {
122                  case 1:
123                      Console.WriteLine("January");
124                      break;
125                  case 2:
126                      Console.WriteLine("February");
127                      break;
128                  case 3:
129                      Console.WriteLine("March");
130                      break;
131                  case 4:
132                      Console.WriteLine("April");
133                      break;
134                  case 5:
135                      Console.WriteLine("MAy");
136                      break;
137                  case 6:
138                      Console.WriteLine("June");
139                      break;
140                  case 7:
141                      Console.WriteLine("July");
142                      break;
143                  case 8:
144                      Console.WriteLine("August");
145                      break;
146                  case 9:
147                      Console.WriteLine("September");
```

```
148                     break;
149                 case 10:
150                     Console.WriteLine("October");
151                     break;
152                 case 11:
153                     Console.WriteLine("November");
154                     break;
155                 case 12:
156                     Console.WriteLine("December");
157                     break;
158                 default:
159                     Console.WriteLine("Invalid month");
160                     break;
161             }
162 
163             //Looping statement
164 
165             //for loop
166             Console.WriteLine("Using for loop");
167             for (int i = 1; i < 10; i++)
168             {
169                 Console.WriteLine($"The Methodology {i} is checked");
170             }
171 
172             //while loop
173             Console.WriteLine("Using while loop");
174             int m = 1;
175             while (m < 10)
176             {
177                 Console.WriteLine($"The methodology {m} is checked");
178                 m++;
179             }
180 
181             //do while loop
182             Console.WriteLine($"Using do while loop");
183             int s = 2;
184             do
185             {
186                 Console.WriteLine($"The methodology{s} is checked");
187                 s++;
188             }
189             while (s <= 10);
190 
191 
192 
193 
194             //foreach statement
195             string[] fruits = { "Lemon", "orange", "banana", "Apple",      ↵
                  "Grapes", "Cherry" };
```

```
196             foreach (string fruit in fruits)
197             {
198                 Console.WriteLine("The fruit name is : ");
199             }
200 
201 
202             //continue
203             Console.WriteLine("continue statement");
204             Console.WriteLine("Enter a number : 20");
205             for(int i = 1; i <= 10; i++)
206             {
207                 if (i % 5==0)
208                 {
209                     continue;
210                 }
211                 Console.WriteLine(i);
212 
213             }
214 
215 
216             //goto statement
217             int age;
218         startloop:
219             Console.WriteLine("enter a age between (0-120)");
220             age = Convert.ToInt32(Console.ReadLine());
221             if (age>0 || age< 120)
222             {
223                 Console.WriteLine("The valid age is : ");
224                 goto startloop;
225             }
226             Console.WriteLine($"The valid age is : {age}");
227 
228 
229 
230 
231 
232 
233 
234 
235 
236 
237 
238         }
239     }
240 
241 }
242 
```