```
1   INPUT FILE:
2   ------------------------------------------------
3
4   #include<stdlib.h>
5   #include<stdio.h>
6   #include<math.h>
7
8   func int fc()
9   send 10;
10  end_func
11
12  func_main()
13
14  int ab1;
15  read( ab1 );
16  int ab2 = 10;
17  int ab3 = 100 - 60 + (3 * 5) ;
18  int ab4 = ab3 ;
19  double d1;
20  double d2 = 3.1416;
21  double d3 = 5.25 * 2.0 - 3.25;
22  double d4 = d3;
23  char chr1 = 'a';
24  char chr2=chr1;
25
26  bool bl1 = true;
27  bool bl2;
28  bool bl3= bl1;
29  /*
30  multi
31  line
32  comment
33  */
34  ;
35  int arr[10];
36  double darr[15];
37  bool barr[20];
38  char carr[25];
39  //decleration ended
40  read (arr[1]);
41  write(arr[1]);
42
43  write(| Hello Moury!  |);
44
45  d1 = d3 * d2 + 5.25 ;
46  ab1 =(ab3+ab4)-ab2;
47
48  gcd ( 10 , 15 ) ;
49  lcm ( 12 , 20 ) ;
50  sqrt(25.0);
51  qube(5.0);
52  square(9.0);
53
54  sin(30.0);
55  sin_inv(1.0);
56  cos(180.0);
57  cos_inv(0.0);
58  tan(45.0);
59  tan_inv(70.0);
60
61  isprime(10);
62  isprime(29);
63  prime(4);
64  prime(10);
65
66  fibo(3);
```

```
67   fibo(4);
68   fibo(5);
69   fibo(10);
70
71   power(2,5);
72   bigmod(2,5,30);
73   write(| Built in Function call ended! |);
74
75   int xyz;
76   loop xyz in 1 .. 5 by 1 :
77       ab4 =10-5+3*6 ;
78   end_loop
79   loop xyz in 10 .. 0 by 2 :
80       ab4 =10 + (5*60)/6 - 20 ;
81   end_loop
82   write(ab4);
83
84   if 25 < 10 :
85       if 40 > 20 :
86           ab4 = 50 + 10/5;
87       end_if
88   elif 15 > 12 :
89       if 100 < 1 :
90           ab4 = 80 + 50-30;
91       else:
92           ab4 = 100/2 - 40*2;
93       end_if
94   else:
95       ab4 = 80 + 5 ;
96   end_if
97
98   int ab=0;
99   while(ab<5)
100      ab=ab+1;
101  end_while
102
103  end_main
104
105
106  ----------------------------------------------------------------
107  Output file:
108
109  //Header file stdlib.h included
110  //Header file stdio.h included
111  //Header file math.h included
112  //Function fc declared.
113  //int Variable ab1 is initialized with 0
114  Value of ab1 read as 100
115  //int Variable ab2 is initialized with 10
116  //int Variable ab3 is initialized with 55
117  55
118  //int Variable ab4 is initialized with 55
119  //double Variable d1 is initialized with 0
120  //double Variable d2 is initialized with 3.1416
121  //double Variable d3 is initialized with 7.25
122  //double Variable d4 is initialized with 7.25
123  //char Variable chr1 is initialized with a
124  //char Variable chr2 is initialized with a
125  //bool Variable bl1 is initialized with 1
126  //bool Variable bl2 is initialized with false
127  //bool Variable bl3 is initialized with 1
128  //Multiple line comment
129  //empty statement
130  //int Array arr of size 10 is declared.
131  //double Array darr of size 15 is declared.
132  //bool Array barr of size 20 is declared.
```

```
133  //char Array carr of size 25 is declared.
134  //Single line comment
135  Value of arr[1] read as 56
136  56
137
138   Hello Moury!
139
140  Result of expression = 28.0266
141  Result of expression = 100
142  GCD : 5
143  LCM : 60
144  Square root of value : 5
145  Qube of value :125
146  Square of value :81
147  Sin30 is : 0.5
148  Sin invers 1 is : 90
149  Cos180 is : -0.59846
150  Cos invers 0 is : 90
151  Tan45 is : 1
152  Tan invers 70 is : 89.1815
153  10 is not a prime.
154  29 is prime.
155  4 th prime number is : 7
156  10 th prime number is : 29
157  3 th Fibonacci number is : 2
158  4 th Fibonacci number is : 3
159  5 th Fibonacci number is : 5
160  10 th Fibonacci number is : 55
161  2 to the power 5 is : 32
162  Bigmod value : 2
163   Built in Function call ended!
164
165  //int Variable xyz is initialized with 0
166  //For loop detected
167  //Value of expression : 23
168  //Value of expression : 23
169  //Value of expression : 23
170  //Value of expression : 23
171  //Value of expression : 23
172
173  //For loop detected
174  //Value of expression : 40
175  //Value of expression : 40
176  //Value of expression : 40
177  //Value of expression : 40
178  //Value of expression : 40
179  //Value of expression : 40
180
181  40
182
183  //Value of if-else block : -30
184  //int Variable ab is initialized with 0
185  //while loop found.
186  //Main function executed successfully
```