Lab 30

```
1  #include <stdio.h>
2  main()
3  {
4      float one2D[5][5], two2D[5][5], three2D[5][5], sum = 0, avg = 0;
5      int w_size = 0, h_size = 0, i, j, run = 0;
6      char finish = 'y';
7
8      while (finish == 'y')
9      {
10         while (w_size <= 0 || w_size > 5)
11         {
12             printf("Enter width size of array (maximum = 5) : ");
13             scanf("%d", &w_size);
14             printf("\n");
15             if (w_size <= 0 || w_size > 5)
16             {
17                 printf("\"Enter 1 - 5\"\n\n");
18             }
19         }
20
21         while (h_size <= 0 || h_size > 5)
22         {
23             printf("Enter height size of array (maximum = 5) : ");
24             scanf("%d", &h_size);
25             printf("\n");
26             if (h_size <= 0 || h_size > 5)
27             {
28                 printf("\"Enter 1 - 5\"\n\n");
```

```
29          }
30      }
31      for (i = 0; i < h_size; i++)
32      {
33          for (j = 0; j < w_size; j++)
34          {
35              one2D[i][j] = 0;
36              two2D[i][j] = 0;
37              three2D[i][j] = 0;
38          }
39      }
40      printf("Enter number in first array (%d x %d) \n", w_size, h_size);
41      for (i = 0; i < h_size; i++)
42      {
43          for (j = 0; j < w_size; j++)
44          {
45              printf("First[%d][%d] : ", i, j);
46              scanf("%f", &one2D[i][j]);
47          }
48      }
49      printf("\nEnter number in second array (%d x %d) \n", w_size, h_size);
50      for (i = 0; i < h_size; i++)
51      {
52          for (j = 0; j < w_size; j++)
53          {
54              printf("Second[%d][%d] : ", i, j);
55              scanf("%f", &two2D[i][j]);
56          }
57      }
58      printf("\nMultipy Array is (%d x %d) \n", w_size, h_size);
```

```
59          for (i = 0; i < h_size; i++)
60          {
61              for (j = 0; j < w_size; j++)
62              {
63                  three2D[i][j] = one2D[i][j] * two2D[i][j];
64                  printf("\nThree[%d][%d] : %.2f", i, j, three2D[i][j]);
65              }
66          }
67          for (i = 0; i < h_size; i++)
68          {
69              for (j = 0; j < w_size; j++)
70              {
71                  sum += three2D[i][j];
72              }
73          }
74          avg = sum / (w_size * h_size);
75          printf("\n\nAverage of multipy value in array is  %.2f / %d  = \"%.2f\" ",
76      sum,w_size*h_size,avg);
77          run = 1;
78          while (run == 1)
79          {
80              printf("\n\nContinue Program ? (y/N) : ");
81              scanf(" %c", &finish);
82              printf("\n");
83              if (finish == 'y' || finish == 'N')
84              {
85                  run = 0;
86                  w_size = 0;
87                  h_size = 0;
88                  sum=0;
```

```
89              }
90              else
91              {
92                  printf("Enter only \" y \" or \"N\"");
93              }
94          }
95          if (finish == 'N')
96          {
97              printf("\"End Program\"\n");
98          }
99      }
100 }
```