## Lab 32

```
1
      #include <stdio.h>
      void defaultArray2D(int w size, int h size);
 2
      void defaultArray3D(int w size, int h size, int d size);
 3
 4
      main()
 5
      {
         int select = 0, w size = 0, h size = 0, d size = 0;
 6
 7
         char finish = 'y';
 8
 9
         while (finish == 'y')
10
         {
11
            while (select != 1 && select != 2)
12
            {
                printf("\nArray2D Enter (1) / Array3D Enter (2) : ");
13
                scanf("%d", &select);
14
                if (select != 1 && select != 2)
15
16
                {
                   printf("\"Enter only \"1\" or \"2\"\n\n");
17
                }
18
            }
19
20
            if (select == 1)
21
                while (w size \neq 0 || w size \Rightarrow 10)
22
23
                   printf("Enter width size : ");
24
25
                   scanf("%d", &w size);
                   if (w size \neq 0 || w size \Rightarrow 10)
26
27
                      printf("\"Maximum size is 10\"\n");
28
```

```
}
29
30
                }
                while (h_size \leq 0 || h_size > 10)
31
32
                   printf("Enter height size : ");
33
                   scanf("%d", &h size);
34
                   if (h size \neq 0 || h size \Rightarrow 10)
35
36
                       printf("\"Maximum size is 10\"\n");
37
38
                   }
39
                }
                printf("\n");
40
                defaultArray2D(w size, h size);
41
             }
42
             if (select == 2)
43
             {
44
                while (w size \neq 0 || w size \Rightarrow 10)
45
46
                {
                   printf("Enter width size : ");
47
                   scanf("%d", &w size);
48
                   if (w size \neq 0 || w size \Rightarrow 10)
49
50
                       printf("\"Maximum size is 10\"\n");
51
52
                   }
53
                }
                while (h size <= 0 || h size > 10)
54
55
                   printf("Enter height size : ");
56
                   scanf("%d", &h size);
57
                   if (h size \neq 0 || h size \Rightarrow 10)
58
```

```
59
                  {
                     printf("\"Maximum size is 10\"\n");
60
                  }
61
               }
62
               while (d size \neq 0 || d size \Rightarrow 10)
63
64
                  printf("Enter array depth : ");
65
                  scanf("%d", &d size);
66
                  if (d_size \leftarrow 0 || d_size > 10)
67
68
                  {
                     printf("\"Maximum size is 10\"\n");
69
                  }
70
               }
71
               printf("\n");
72
               defaultArray3D(w size, h size, d size);
73
74
            }
            while (select > 0)
75
76
            {
77
               printf("\nContinue Program ? (y/N) : ");
               scanf(" %c", &finish);
78
               if (finish == 'y' || finish == 'N')
79
80
                  w size = 0;
81
                  h size = 0;
82
                  d size = 0;
83
                  select = 0;
84
85
               }
               else
86
               {
87
                  printf("Enter only \"y\" or \"N\"");
88
```

```
89
                 }
              }
 90
              if (finish == 'N')
 91
 92
                 printf("\"End Program\"");
 93
              }
 94
              printf("\n");
 95
           }
 96
 97
        }
        void defaultArray2D(int w_size, int h_size)
 98
 99
        {
100
           int Array2D[10][10], i, j;
           for (i = 0; i < h \text{ size}; i++)
101
102
           {
              for (j = 0; j < w \text{ size}; j++)
103
104
              {
105
                 Array2D[i][j] = 0;
                 printf("Array2D [%d][%d] = %d\n", i, j, Array2D[i][j]);
106
107
              }
          }
108
109
        void defaultArray3D(int w size, int h size, int d size)
110
111
112
           int Array3D[10][10][10], i, j, k;
           for (i = 0; i < d \text{ size}; i++)
113
114
115
              for (j = 0; j < h \text{ size}; j++)
116
117
                 for (k = 0; k < w \text{ size}; k++)
118
                 {
```