```c
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main(void)
5  {
6      void MyAlloc(int **ptr, unsigned int numberOfElements);
7
8      //variable declarations
9      int *piArray = NULL;
10     unsigned int num_elements;
11     int i;
12
13     // code
14     printf("\n\n");
15     printf("How Many Elements You Want In Integer Array ?\n\n");
16     scanf("%u", &num_elements);
17
18     printf("\n\n");
19     MyAlloc(&piArray, num_elements);
20
21     printf("Enter %u Elements To Fill Up Your Integer Array : \n\n",
         num_elements);
22     for (i = 0; i < num_elements; i++)
23         scanf("%d", &piArray[i]);
24
25     printf("\n\n");
26     printf("The %u Elements Entered By You In The Integer Array : \n\n",
         num_elements);
27     for (i = 0; i < num_elements; i++)
28         printf("%u\n", piArray[i]);
29
30     printf("\n\n");
31     if (piArray)
32     {
33         free(piArray);
34         piArray = NULL;
35         printf("Memory Allocated Has Now Been Successfully Freed !!!\n\n");
36     }
37
38     return(0);
39  }
40
41  void MyAlloc(int **ptr, unsigned int numberOfElements)
42  {
43      // code
44      *ptr = (int *)malloc(numberOfElements * sizeof(int));
45      if (*ptr == NULL)
46      {
47          printf("Could Not Allocate Memory !!! Exitting Now ...\n\n");
48          exit(0);
49      }
50
```

```
51      printf("MyAlloc() Has Successfully Allocated %lu Bytes For Integer Array !!!\n ↵
        \n", (numberOfElements * sizeof(int)));
52 }
53
```