```
#include <stdio.h>
#include <stdlib.h>
int main() {
  int n;
  printf("Enter the number of elements: ");
  if (scanf("%d", &n) != 1 || n <= 0) {
     printf("Invalid input. Please enter a positive integer.\n");
     return 1;
  }
  int *arr = malloc(n * sizeof(int));
  if (!arr) {
     printf("Memory allocation failed.\n");
     return 1;
  }
  printf("Enter %d integers:\n", n);
  for (int i = 0; i < n; i++) {
     if (scanf("%d", &arr[i]) != 1) {
        printf("Invalid input. Exiting.\n");
        free(arr);
        return 1;
     }
  }
  printf("\nResults:\n");
  for (int i = 0; i < n; i++) {
     if (arr[i] \% 2 == 0)
        printf("%d is Even\n", arr[i]);
     else
        printf("%d is Odd\n", arr[i]);
  }
  free(arr);
  return 0;
}
```

```
C:\Users\upper\OneDrive\DATA STRUCTRES\nultiple matrix.exe

Enter the number of elements: 5

Enter 5 integers:
1 4 5 3 6

Results:
1 is Odd
4 is Even
5 is Odd
3 is Odd
6 is Even

Process exited after 13.64 seconds with return value 0

Press any key to continue . . .
```