

WEEK - 4

REC-CIS

MAHALAKSHMI S 2024-CSE M2

making and Looping - while ...

- > Week-06-Decision Making and Looping - for
- > Assessment-06-Decision Making and Looping - for
- > Assessment-07-Nested Loops - while and for, Jumps ...
- > Week-06-One-Dimensional Arrays
- > Week-06-01-One-Dimensional Arrays
- > Week-07-Searching Algorithms-Linear and Binary
- > Assessment-07-Searching Algorithms-Linear and Binary
- > Week-08-Sorting Algorithms-Bubble and Selection
- > Assessment-08-Sorting Algorithms-Bubble and Selection
- > Week-09-Two-Dimensional and Multi-dimensional Arrays
- > Assessment-09-Two-Dimensional and Multi-dimensional Arrays

Week-04-Decision Making and Looping - while, do...while and for

Week-04-01-Practice Session-Coding

✓ Done

Week-04-02-Practice Session-Coding

✓ Done

Assessment-04-Decision Making and Branching - if...else if and switch...case

Calculate Grade

✓ Done

Railway - Seating Arrangement for Sleeper Class

✓ Done

Basic Calculator

✓ Done

Doll Show

✓ Done

Practice Session 1

```

1 #include<stdio.h>
2 int main(){
3     int T, i = 0, n, t;
4     scanf("%d", &T);
5     while(i < T){
6         scanf("%d", &n);
7         t = n / 4;
8         if(t % 2 == 0 && n % 2 == 0){
9             printf("No\n");
10        }
11        else if(t % 2 == 1 && n % 2 == 1){
12            printf("No\n");
13        }
14        else{
15            printf("Yes\n");
16        }
17        i++;
18    }
19    return 0;
20 }

```

| | Input | Expected | Got | |
|---|-------|----------|-----|---|
| ✓ | 3 | Yes | Yes | ✓ |
| | 1 | Yes | Yes | |
| | 6 | No | No | |
| | 7 | | | |

Passed all tests! ✓

```

1  #include<stdio.h>
2  int main(){
3      int n, x, y;
4      scanf("%d", &n);
5      while(n > 0){
6          x = n % 10;
7          if(x == 1 || x == 2 || x == 3 || x == 5 || x == 7){
8              y = y + 0;
9          }
10         else if(x == 0 || x == 4 || x == 6 || x == 9){
11             y = y + 1;
12         }
13         else{
14             y = y + 2;
15         }
16         n = n / 10;
17     }
18     printf("%d", y);
19     return 0;
20 }

```

| | Input | Expected | Got | |
|---|-------|----------|-----|---|
| ✓ | 630 | 2 | 2 | ✓ |
| ✓ | 1288 | 4 | 4 | ✓ |

Passed all tests! ✓

```

1  #include<stdio.h>
2  int main(){
3      int n, d = 0;
4      scanf("%d", &n);
5      while(n > 0){
6          n = n / 2;
7          d++;
8      }
9      printf("%d", d);
10     return 0;
11 }

```

| | Input | Expected | Got | |
|---|-------|----------|-----|---|
| ✓ | 10 | 4 | 4 | ✓ |
| ✓ | 5 | 3 | 3 | ✓ |
| ✓ | 20 | 5 | 5 | ✓ |
| ✓ | 500 | 9 | 9 | ✓ |
| ✓ | 1000 | 10 | 10 | ✓ |

Passed all tests! ✓

Practice Session 2

```

1  #include<stdio.h>
2  int main(){
3      int a, b = 0, c = 0;
4      for (a = 0; b < 10; b++){
5          scanf("%d", &a);
6          if ( a % 2 != 0){
7              c = c + 1;
8          }
9      }
10     printf("%d", c);
11     return 0;
12 }

```

| | Input | Expected | Got | |
|---|------------------------------|----------|-----|---|
| ✓ | 5 10 15 20 25 30 35 40 45 50 | 5 | 5 | ✓ |

Passed all tests! ✓

```

1  #include<stdio.h>
2  int main(){
3      int x, y = 0, c = 0;
4      scanf("%d", &x);
5      while(x > 0){
6          y = x % 10;
7          if (y == 0 || y == 6 || y == 8 || y == 9){
8              c++;
9          }
10         x = x / 10;
11     }
12     if (c >= 1){
13         printf("true");
14     }
15     else{
16         printf("false");
17     }
18     return 0;
19 }

```

| | Input | Expected | Got | |
|---|-------|----------|-------|---|
| ✓ | 6 | true | true | ✓ |
| ✓ | 89 | true | true | ✓ |
| ✓ | 25 | false | false | ✓ |

Passed all tests! ✓

```

1 #include<stdio.h>
2 v int main(){
3     long long int n, t, i, nut = 0;
4     scanf("%lld %lld", &n, &t);
5 v     for(i = 1; i <= n; i++){
6         nut += i;
7 v         if(nut == t){
8             nut = nut - 1;
9         }
10    }
11    printf("%lld", nut % 1000000007);
12    return 0;
13 }

```

| | Input | Expected | Got | |
|---|--------|----------|-----|---|
| ✓ | 2 2 | 3 | 3 | ✓ |
| ✓ | 2 1 | 2 | 2 | ✓ |
| ✓ | 3 3 | 5 | 5 | ✓ |

Passed all tests! ✓