

- ✓ Lab-04-Deci~~sion~~ Making and Branching - if...else if and switch...case
- Week-04-01-Practice Session-Coding Mark as done
- Initialization of structures, Accessing structures Mark as done
- Nested structures, Arrays of structures Mark as done
- ✓ Week-04-Deci~~sion~~ Making and Looping - while, do...while and for
- Week-04-01-Practice Session-Coding Mark as done
- Week-04-02-Practice Session-Coding Mark as done
- ✓ Assessment-04-Deci~~sion~~ Making and Branching - if...else if and switch...case

✓ Done

✓ Done

✓ Done

```

1 #include<stdio.h>
2 int main()
3 {
4     int T,i=0,n,t;
5     scanf("%d",&T);
6     while(i<T)
7     {
8         scanf("%d",&n);
9         t=n/4;
10        if(t%2==0&&n%2==0)
11        {
12            printf("No\\n");
13        }
14        else if(t%2==1&&n%2==1)
15        {
16            printf("Yes\\n");
17        }
18        else
19        {
20            printf("No\\n");
21        }
22        i++;
23    }
24
25 }

```

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

**Answer:** (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int n;
5     scanf("%d", &n);
6     int holes[10]={1,0,0,0,1,0,1,0,2,1};
7     int total_holes = 0;
8     while(n>0)
9     {
10        int dig=n%10;
11        total_holes+=holes[dig];
12        n/=10;
13    }
14    printf("%d",total_holes);
15    return 0;
16 }
```

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

Passed all tests! ✓

**Answer:** (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int sum, count, value;
5     scanf("%d", &value);
6     sum = 1;
7     while(sum <= value)
8     {
9         sum *= 2;
10    count++;
11 }
12 printf("%d", count);
13 return 0;
14 }
```

Ans

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

**Answer:** (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int i,n,odd=0;
5     for(i=0;i<10;i++)
6     {
7         scanf("%d",&n);
8         if(n%2==1)
9         {
10             odd++;
11         }
12     }
13     printf("%d",odd);
14     return 0;
15 }
```

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

**Answer:** (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int n,rem,rev=0;
5     scanf("%d",&n);
6     rem = n%10;
7     if(rem==0||rem==1||rem==6||rem==8||rem==9)
8     {
9         while(n!=0)
10        {
11            rem=n%10;
12            rev=rev*10+rem;
13            n=n/10;
14        }
15        printf("true");
16    }
17    else
18    {
19        printf("false");
20    }
21
22 }
```

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

**Answer:** (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     long n,k,sum=0;
5     scanf("%ld%ld",&n,&k);
6     for(int i=1;i<=n;i++)
7     {
8         sum+=i;
9         if(sum==k)
10        {
11            sum-=1;
12        }
13    }
14    printf("%ld",sum%10000000007);
15
16 }
```

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