

```

1  #include<stdio.h>
2  int main()
3  {
4      int t;
5      scanf("%d", &t);
6      while (t)
7      {
8          int n;
9          scanf("%d",&n);
10         t--;
11         int dp[n+1] ;
12         dp[1]=1;
13         for (int i=2;i<n+1;i++)
14         {
15             for (int k=1;k*k<=i
16             {
17                 if(!(dp[i-k*k]))
18                     dp [i]=1;
19             }
20             else
21                 dp [i]=0;
22         }
23         if (dp[n]==1)
24             printf("Yes\n");
25     else
26         printf("No\n");
27     }
28     return 0;
29 }

```

	Input	Expected	Got	
✓	3	Yes	Yes	✓
	1	Yes	Yes	

```

1 #include<stdio.h>
2 int countHoles(int num){
3     int holes =0;
4     while(num>0)
5     {
6         int digit =num%10;
7         switch(digit){
8             case 0:case 4:case
9             holes+=1;
10            break;
11            case 8:
12            holes +=2 ;
13            break;
14        }
15        num /=10;
16    }
17    return holes;
18 }
19
20 int main()
21 {
22     int num;
23     scanf("%d",&num);
24     int result =countHoles(num)
25     printf("%d\n",result);
26     return 0;
27 }

```

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

Passed all tests! ✓

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int min_denominations(int N){
3     int count =0;
4     int value =1;
5     while(value <=N){
6         count++;
7         value*=2;
8     }
9     return count;
10 }
11 int main()
12 {
13     int N;
14
15     scanf("%d",&N);
16     int result =
17     min_denominations(N);
18     printf("%d\n",result);
19     return 0;
20 }
21
```

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

Passed all tests! ✓

```

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

```

	Input	Expe
✓	5 10 15 20 25 30 35 40 45 50	5

Passed all tests! ✓

```
1 #include<stdio.h>
2 #include<stdbool.h>
3 bool is_Confusing_Number(int N)
4     int original =N;
5     int rotated =0;
6     while(N>0){
7         int digit =N%10;
8         N/=10;
9         switch(digit){
10             case 0:case 1:case
11                 rotated =rotated*10
12                 break;
13             case 6:
14                 rotated =rotated*10
15                 break;
16             case 9:
17                 rotated =rotated*10
18                 break;
19             default:
20                 return false;
21         }
22     }
23     return rotated !=original;
24 }
25 int main()
26 {
27     int N;
28     scanf("%d", &N);
29     if(is_Confusing_Number(N))
30     {
31         printf("true\n");
32     }
33     else
34     {
35         printf("false");
36     }
37     return 0;
38 }
39
```

```
29     if(is_Confusing_Number(N))
30     {
31         printf("true\n");
32     }
33     else
34     {
35         printf("false");
36     }
37     return 0;
38 }
39
```

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

Passed all tests! ✓


```

1 //main.c
2 int main()
3 {
4     long int n,k,sum;
5     scanf("%ld %ld", &n, &k);
6     sum=0;
7     for(int i=0;i<=n;i++)
8     {
9         sum+=i;
10        if(sum==k)
11        {
12            sum-=1;
13        }
14    }
15    printf("%ld",sum %10000000007);
16    return 0;
17 }

```

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

Passed all tests! ✓