

```

1 * 
2 * Complete the 'fourthBit' function below.
3 *
4 * The function is expected to return an INTEGER.
5 * The function accepts INTEGER number as parameter.
6 */
7
8 int fourthBit(int number)
9 {
10    int binary[32];
11    int i=0;
12    while(number>0)
13    {
14        binary[i]=number%2;
15        number/=2;
16        i++;
17    }
18    if(i>=4)
19    {
20        return binary[3];
21    }
22    else
23    return 0;
24 }

```

	Test	Expected	Got	
✓	printf("%d", fourthBit(32))	0	0	✓
✓	printf("%d", fourthBit(77))	1	1	✓

Passed all tests! ✓

```

1  /*
2  * Complete the 'pthFactor' function below.
3  *
4  * The function is expected to return a LONG_INTEGER.
5  * The function accepts following parameters:
6  * 1. LONG_INTEGER n
7  * 2. LONG_INTEGER p
8  */
9
10 long pthFactor(long n, long p)
11 {
12     int count=0;
13     for(long i=1;i<=n;++i)
14     {
15         if(n%i==0)
16         {
17             count++;
18             if(count==p)
19             {
20                 return i;
21             }
22         }
23     }
24     return 0;
25 }
```

	Test	Expected	Got	
✓	printf("%ld", pthFactor(10, 3))	5	5	✓
✓	printf("%ld", pthFactor(10, 5))	0	0	✓
✓	printf("%ld", pthFactor(1, 1))	1	1	✓

Passed all tests! ✓

```

1  /*
2  * Complete the 'myFunc' function below.
3  *
4  * The function is expected to return an INTEGER.
5  * The function accepts INTEGER n as parameter.
6  */
7
8 int myFunc(int n)
9 {
10    while(n>1)
11    {
12        if(n%20==0)
13        {
14            n/=20;
15        }
16        else if(n%10==0)
17        {
18            n/=10;
19        }
20        else
21        {
22            return 0;
23        }
24    }
25    return 1;
26 }
27

```

Test	Expected	Got
✓ printf("%d", myFunc(1))	1	1 ✓
✓ printf("%d", myFunc(2))	0	0 ✓
✓ printf("%d", myFunc(10))	1	1 ✓
✓ printf("%d", myFunc(25))	0	0 ✓
✓ printf("%d", myFunc(200))	1	1 ✓

Passed all tests! ✓

```

1  /*
2   * Complete the 'powerSum' function below.
3   *
4   * The function is expected to return an INTEGER.
5   * The function accepts following parameters:
6   * 1. INTEGER x
7   * 2. INTEGER n
8   */
9
10 int powerSum(int x, int m, int n)
11 {
12     if(x==0)
13     {
14         return 1;
15     }
16     if(x<0)
17     {
18         return 0;
19     }
20     int count=0;
21     for(int i=m;;i++)
22     {
23         int power=1;
24         for(int j=0;j<n;j++)
25         {
26             power*=i;
27         }
28         if(power>x)
29         {
30             break;
31         }
32         count+=powerSum(x-power,i+1,n);
33     }
34     return count;
35 }

```

	Test	Expected	Got	
✓	printf("%d", powerSum(10, 1, 2))	1	1	✓

Passed all tests! ✓