

```

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! ✓

```

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! ✓

```

5  // The function accepts INTEGER n as parameter.
6  */
7
8  int myFunc(long long N)
9  {
10     while(N>1)
11     {
12         if(N%200==0)
13         {
14             N/=200;
15         }
16         else if(N%10==0)
17         {
18             N/=10;
19         }
20         else
21         {
22             return 0;
23         }
24     }
25     return (N==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! ✓

```

6  * 1. INTEGER x
7  * 2. INTEGER n
8  */
9  #include<stdio.h>
10 #include<math.h>
11 int powerSum(int x, int m, int n)
12 {
13     int c=0;
14     int limit=(int)pow(x,1.0/n);
15     int totalCombinations=1<<limit;
16     for(int mask=0;mask<totalCombinations;mask++)
17     {
18         int sum=0;
19         for(int j=1;j<=limit;j++)
20         {
21             if(mask&(1<<(j-1)))
22             {
23                 sum+=(int)pow(j,n);
24             }
25         }
26         if(sum==x)
27         {
28             c++;
29         }
30     }
31     return c;
32 }

```

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

Passed all tests! ✓