


[Learn how your code will be evaluated \(https://helpcenter.mymapit.in/?ht\\_kb=things-to-know-before-attempting-the-test\)](https://helpcenter.mymapit.in/?ht_kb=things-to-know-before-attempting-the-test)
[Utility codes for quick start \(https://helpcenter.mymapit.in/?page\\_id=871\)](https://helpcenter.mymapit.in/?page_id=871)

## Section - 1

Prev

Next

Question No. | 17 of | 36 || 50 Marks

## Conversion binary to decimal

Given a string consisting of digits '0' & '1', we need to write a program to convert the given binary string into an equivalent decimal number.

Complete the function `binaryToDecimal` and `str_length` that accepts a binary string and returns an integer of that number's representation in decimal(base-10).

### Input Format:

The first line contains an integer 't' which denotes the number of test cases or queries to be run. Then the test cases follow.

First line of each test case contains an integer 'N' representing the size of the array.

Second line contains 'N' integers (only 0 and 1) representing the Binary string in the array.

### Sample Input 1:

2 // Number of test cases

C (gcc 4.8.3) ▼



▶ Compile &amp; Run

O/P »

```

1  #include <stdio.h>
2
3  int main(){
4
5      // input
6      int numberOfInputs;
7      scanf("%d",&numberOfInputs);
8
9      while(numberOfInputs != 0){
10
11         int n;
12         scanf("%d",&n);
13         char binary[n];
14         scanf("%s",&binary);
15
16         // algo
17         int power = 0;
18         int ans = 0;
19         int i;
20         for(i = n - 1; i >= 0; i--){
21             int digFromEnd;
22             if(binary[i] == '1') digFromEnd = 1;
23             else digFromEnd = 0;
24
25             ans += digFromEnd*(pow(2,power));
26             power++;
27         }
28
29         printf("%d\n", ans);
30         numberOfInputs--;
31     }
32 }
```

This website uses cookies. By continuing to use this website , you agree to their use. Further information about cookies can be found in our **Privacy Policy**.  
([https://helpcenter.mymapit.in/?ht\\_kb=service-policy](https://helpcenter.mymapit.in/?ht_kb=service-policy)).

I Understand