Flipping bits

Binary

Binary numbers are numbers represented in base 2.

For example, 23 can be written as 10111 in binary form.

To convert decimal N to binary we can do it as

```
n = ((N)?floor( log10(N)/log10(2) ) + 1:0); //calculate number of digits in
advance floor(log2(N)) + 1
vector <int> bin(n);
i = n-1;
while(N!=0) {
    bin[i]=N%2;
    N/=2;
    i--;
}
```

To convert binary to decimal

```
string s = "1011";
n = s.length()
int N = 0;
while (n>0) {
    if (s[s.length()-n]=='1') N += pow(2,n-1);
    n--;
}
```

Note :

- Techniques suggested above can be use to convert decimal number system to any other number system or vice - versa.