

```

1: /*-----Add 1 to binary-----*/
2:
3: #include<iostream>
4: #include<string>
5: using namespace std;
6:
7: int binAdd(string &n)    /* If we don't use &
8: the string will be considered as a copy and
9: the actual string will not get effected by
10: this function */
11: {
12:     int len = n.size();
13:     int carry = 1;
14:     int i = len - 1;
15:     int temp;
16:
17:     while(i >= 0)
18:     {
19:         temp = n[i] - '0'; /* We can't
20:         directly sum n[i] with carry so
21:         we're first converting n[i] to
22:         int type data */
23:
24:         temp += carry; /* Now we're
25:         adding the int type value of
26:         n[i] to carry */
27:
28:         if(temp == 2)
29:         {
30:             n[i] = '0';
31:         }
32:         else if(temp == 1)
33:         {
34:             n[i] = '1';
35:             carry = 0;
36:         }
37:         else
38:         {
39:             n[i] = '0';
40:             carry = 0;
41:         }
42:         i--;
43:     }
44:
45:     if(carry == 1)
46:         n = '1' + n;

```

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47: }
48:
49: int main()
50: {
51:     string n;
52:     cout << "Enter your binary number:\n";
53:     cin >> n;
54:
55:     binAdd(n);
56:     cout << "Adding 1 we get " << n;
57:
58:     return 0;
59: }
```