

CODE

```
// to convert binary to decimal

#include<iostream>

#include<stdio.h>

#include<string.h>

using namespace std;

double binaryToDecimal(string binary, int len)
{
    size_t point = binary.find('.');

    if (point == string::npos)
        point = len;

    double intDecimal = 0, fracDecimal = 0, twos = 1;

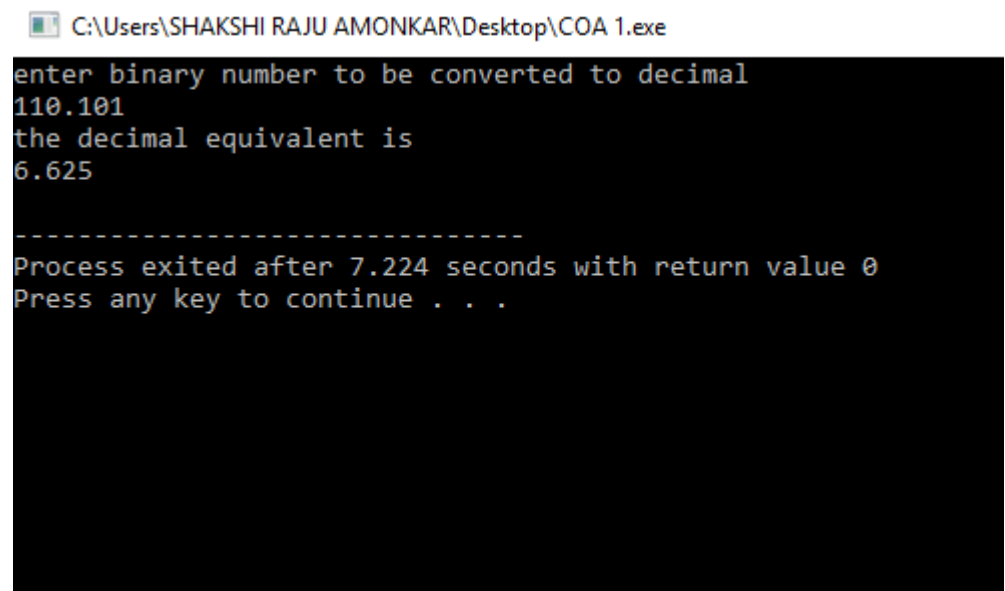
    for (int i = point-1; i>=0; --i)
    {
        intDecimal += (binary[i] - '0') * twos;
        twos *= 2;
    }

    twos = 2;
    for (int i = point+1; i < len; ++i)
    {
        fracDecimal += (binary[i] - '0') / twos;
        twos *= 2.0;
    }

    return intDecimal + fracDecimal;
}
```

```
int main()
{
    string n;
    cout<<"enter binary number to be converted to decimal\n";
    cin>>n;
    cout <<"the decimal equivalent is\n"<< binaryToDecimal(n, n.length()) << "\n";
    return 0;
}
```

OUTPUT



```
C:\Users\SHAKSHI RAJU AMONKAR\Desktop\COA 1.exe
enter binary number to be converted to decimal
110.101
the decimal equivalent is
6.625
-----
Process exited after 7.224 seconds with return value 0
Press any key to continue . . .
```