

X


<https://swayam.gov.in>

https://swayam.gov.in/nc_details/NPTEL

200801199@rajalakshmi.edu.in ▾

NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » **Problem Solving Through Programming In C (course)**



If already registered, click to check your payment status

Course outline

How does an NPTEL online course work? ()

Week 0 : ()

Week 1 ()

Week 2 ()

Week 3 ()

Week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Week 8 : Programming Assignment 3

Due on 2023-09-21, 23:59 IST

Write a C Program to print Binary Equivalent of an Integer using Recursion

Private Test cases used for evaluation	Input	Expected Output	Actual Output	Status
Test Case 1	30	The binary equivalent of 30 is 11110	The binary equivalent of 30 is 11110\n	Passed
Test Case 2	111	The binary equivalent of 111 is 1101111	The binary equivalent of 111 is 1101111\n	Passed

The due date for submitting this assignment has passed.

2 out of 2 tests passed.

You scored 100.0/100.

Assignment submitted on 2023-09-21, 20:15 IST

Your last recorded submission was :

```

1 #include <stdio.h>
2 int binary_conversion(int); //function to convert binary to decimal number
3 int main()
4 {
5     int num, bin; //num is the decimal number and bin is the binary equivalent
6
7     scanf("%d", &num); //The decimal number is taken from the test case data
8     bin = binary_conversion(num); //binary number is stored in variable bin
9     printf("The binary equivalent of %d is %d\n", num, bin);
10    return 0;
11 }
12 int binary_conversion(int num)
13 {
14     if(num==0)
15     {
16         return 0;

```



Week 8 ()**Week 9 ()****Week 10 ()****Week 11 ()****Week 12 ()****DOWNLOAD
VIDEOS ()****Books ()****Text
Transcripts ()****Problem
Solving
Session -
July 2023 ()**

```

17     }
18     else
19     {
20         return (num%2) + 10 * binary_conversion(num/2);
21     }
22 }
23

```

Sample solutions (Provided by instructor)

```

1  #include <stdio.h>
2  int binary_conversion(int); //function to convert binary to decimal number
3  int main()
4  {
5      int num, bin; //num is the decimal number and bin is the binary equivalent
6
7      scanf("%d", &num); //The decimal number is taken from the test case data
8      bin = binary_conversion(num); //binary number is stored in variable bin
9      printf("The binary equivalent of %d is %d\n", num, bin);
10     return 0;
11 }
12 int binary_conversion(int num)
13 {
14     if (num == 0)
15     {
16         return 0;
17     }
18     else
19     {
20         return (num % 2) + 10 * binary_conversion(num / 2);
21     }
22 }

```

