

BINARY ADDITION

Name: BANDA ANOOP REDDY

Regno: 9919004028

Date:14-10-2020

Program:

```
#include<stdio.h>
#include<math.h>
#include<iso646.h>
int main()
{
    int n1=0,n2=0,sum=0,carry=0,new_number=0;
    printf("Enter two binary numbers:\n");
    scanf("%d",&n1);
    scanf("%d",&n2);
    int i=0;
    while((n1!=0)or(n2!=0))
    {
        if((n1%10==0)and(n2%10==0)and(carry==0))
        {
            sum=0;
            carry=0;
        }
        else if((n1%10==0)and(n2%10==1)and(carry==0))
        {
```



```
    sum=1;
    carry=0;
}
else if((n1%10==1)and(n2%10==0)and(carry==0))
{
    sum=1;
    carry=0;
}
else if((n1%10==1)and(n2%10==1)and(carry==0))
{
    sum=0;
    carry=1;
}
else if((n1%10==0)and(n2%10==0)and(carry==1))
{
    sum=1;
    carry=0;
}
else if((n1%10==0)and(n2%10==1)and(carry==1))
{
    sum=0;
    carry=1;
}
else if((n1%10==1)and(n2%10==0)and(carry==1))
{
    sum=0;
    carry=1;
}
}
```



```

else if((n1%10==1)and(n2%10==1)and(carry==1))
{
    sum=1;
    carry=1;
}
new_number+=sum*pow(10,i);
i++;
n1=n1/10;
n2=n2/10;
}
if(carry==1){
new_number+=pow(10,i);
printf("%d\n",new_number);
return 0;
}
}
}

```

Output:

The screenshot shows the OnlineGDB online compiler interface. The main code editor displays the following C program:

```

37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63

```

The program calculates the sum of two binary numbers (1101 and 1110) and outputs the result 11011. The output window at the bottom shows the input and output:

```

Enter two binary numbers:
1101
1110
11011
...Program finished with exit code 0

```