

Workshop 8 – Exercise

Function overloading means two or more functions can have the same name but either the number of arguments or the data type of arguments have to be different (See sample codes of overloading of functions). In this workshop, you will create a program, which includes overloading of function and performs bitwise operation on two numbers.

1) Bitwise operation AND and OR logic

Create a user-defined function, as mentioned below, that takes a decimal number (max 255) as input and prints out its equivalent in 8-bit binary format. (Refer to flowchart if you need help in writing the code).

```
void printDecimalToBinary(int d)
{
    //Type your code here
}
```

Now create another function with same name which takes two decimal numbers as input, performs AND or OR bitwise logic operation as per the input choice given by user. It is already available here for you 😊

```
void printDecimalToBinary(int d1,int d2,char c)
{
    int d;
    if (c=='&')
        d=d1&d2;
    else if (c=='|')
        d=d1|d2;
    printDecimalToBinary(d);
}
```

Your main program should take input of two numbers and performs a logical operation (AND or OR) according to user's choice.

The output should look a bit like this:

```
Please enter decimal number #1 < 256 : 12
Please enter decimal number #2 < 256 : 124
Decimal number #1 in binary : 00001100
Decimal number #2 in binary : 01111100
Please press logical operator '&' for AND or '|' for OR operation: &
Logical AND : 00001100
-----
Process exited after 5.399 seconds with return value 0
Press any key to continue . . .
```