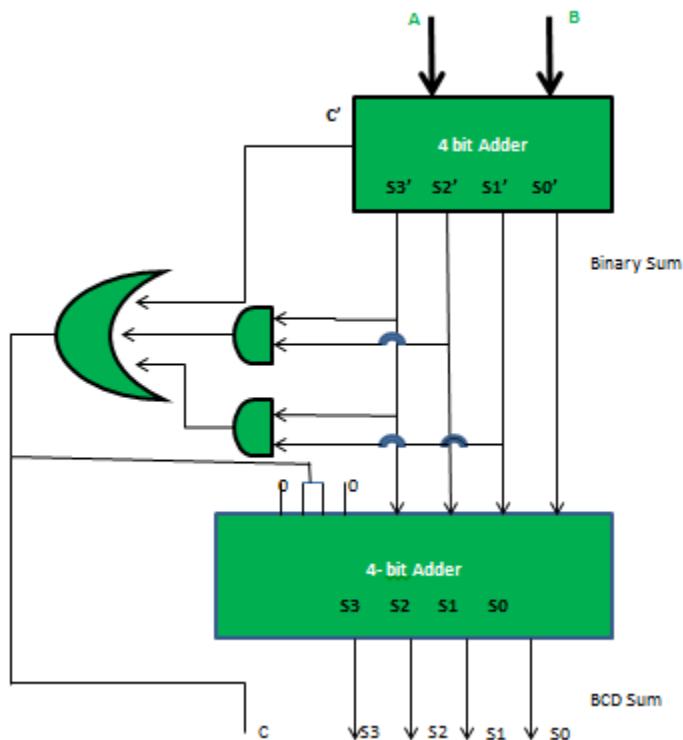


Name: _____

Registration: _____

Design a BCD adder using as building block the 4-bit binary adder shown below. Use the provided block diagram and skeleton file to implement the BCD adder.

```
module add4 (C, S, A, B);  
  
    output [3:0] S;  
    output C;  
    input [3:0] A, B;  
  
    assign {C, S} = A + B;  
  
endmodule
```



```
module bcd (C, S, A, B);  
  
    output [3:0] S;  
    output C;  
    input [3:0] A, B;  
    //Write your code here  
  
endmodule
```