

15:AS  
s = a + b;

```
graph TD; Node1([15:AS  
s = a + b;]) --> Node2([16:AS  
overflow = (a[7] == 0) & (b[7] == 0) & (s[7] == 1) | (a[7] == 1) & (b[7] == 1) & (s[7] == 0);]);
```

16:AS  
overflow = (a[7] == 0) & (b[7] == 0) & (s[7] == 1) | (a[7] == 1) & (b[7] == 1) & (s[7] == 0);