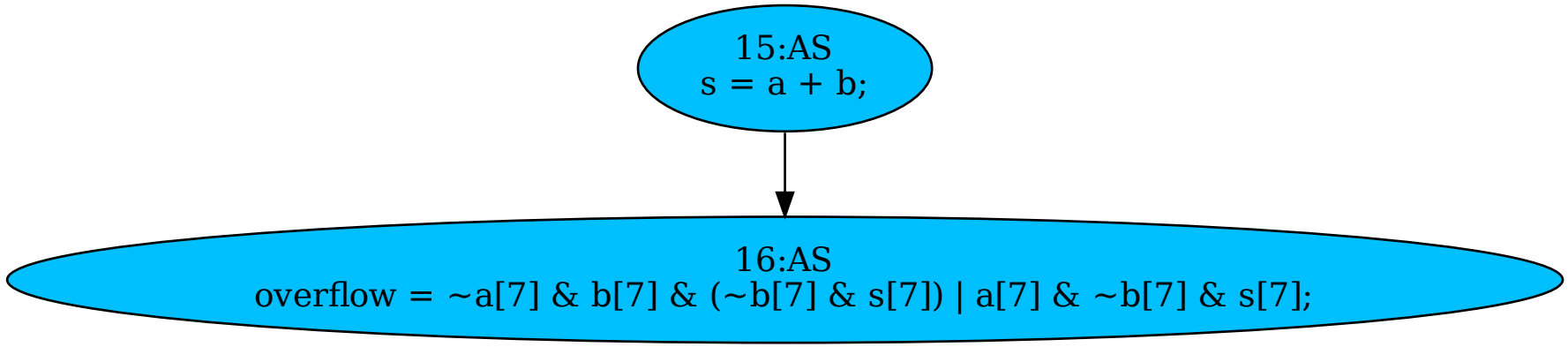


15:AS  
s = a + b;



```
graph TD; A([15:AS  
s = a + b;]) --> B([16:AS  
overflow = ~a[7] & b[7] & (~b[7] & s[7]) | a[7] & ~b[7] & s[7];]);
```

A flow diagram illustrating a transformation. At the top, a light blue oval contains the text "15:AS" and "s = a + b;". A black arrow points downwards from this oval to a larger, light blue oval at the bottom. The bottom oval contains the text "16:AS" and a complex overflow-checking expression: "overflow = ~a[7] & b[7] & (~b[7] & s[7]) | a[7] & ~b[7] & s[7];".

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