

$i \leftarrow 1$

if ($i_1 > 100$)

$a \leftarrow 2 * B[i]$

$A[i] \leftarrow a$

$i \leftarrow i + 1$

if ($a_2 > 20$)

return a

```
graph TD; A["i ← 1"] --> B["if (i₁ > 100)"]; B --> C["a ← 2 * B[i]  
A[i] ← a  
i ← i + 1  
if (a₂ > 20)"]; C --> D["return a"]; C --> B;
```

The flowchart illustrates a loop structure. It begins with an initialization step $i \leftarrow 1$. This leads to a decision node **if** ($i_1 > 100$). If this condition is true, the flow proceeds to a block containing four statements: $a \leftarrow 2 * B[i]$, $A[i] \leftarrow a$, $i \leftarrow i + 1$, and another **if** ($a_2 > 20$) statement. From this block, there are two possible paths: one that loops back to the entry point before the **if** ($i_1 > 100$) condition, and another that leads to the final **return** a statement. If the initial **if** condition is false, the flow proceeds directly to the **return** a statement.