Software Design and Development 2003 : Multiple Choice Question 11

Question 11

Consider the following algorithm.

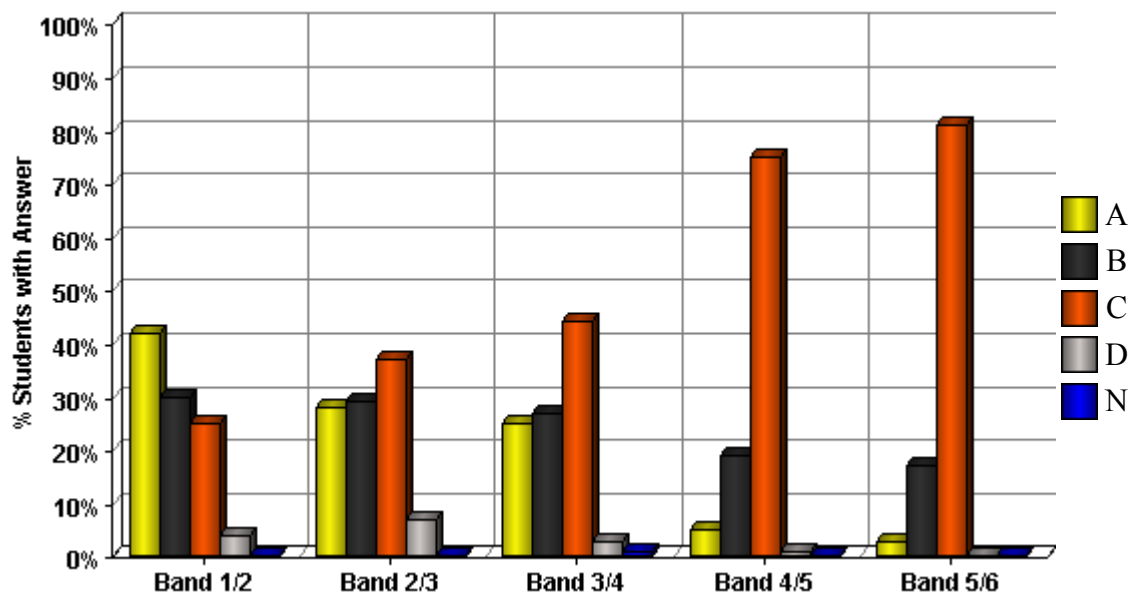```
BEGIN
        READ first_number, second_number
        REPEAT
                total = first_number + second_number
                first_number = second_number
                second_number = total
        UNTIL total > 8
        PRINT second_number
END
```

If first_number = 1 and second_number = 2, what is the first value of second_number printed by the program?

&#10007; A 5
&#10007; B 8
&#10003; C 13
&#10007; D 21

### HSC Statistics on this Question:

**This question appeared as Question 11 in HSC Examination 2003**

|           | Band 1/2 | Band 2/3 | Band 3/4 | Band 4/5 | Band 5/6 |
|-----------|----------|----------|----------|----------|----------|
| A         | 42%      | 28%      | 25%      | 5%       | 3%       |
| B         | 30%      | 29%      | 27%      | 19%      | 17%      |
| C         | 25%      | 37%      | 44%      | 75%      | 81%      |
| D         | 4%       | 7%       | 3%       | 1%       | 0%       |
| N         | 0%       | 0%       | 1%       | 0%       | 0%       |

The table and graph show, for the groups of students whose marks in the examination corresponded to the borderline between two bands, what percentages of each group selected the responses A, B, C and D. N is used to identify: No valid response.