**Approach for Converting Decimal Numbers to Words**

Selected Approach:

The selected approach for converting decimal numbers to words is a custom algorithm that divides the input number into integer and decimal parts, converts each part into words separately, and concatenates the results to form the final string representation.   
The algorithm uses predefined arrays to map numerical digits to their corresponding words and utilizes string manipulation techniques to construct the output.

Reasons for Selection:

* The reasons for this selection is allow customization, it allow adaption to specific requirements and have the freedom to tailor the conversion process to handle monetary amounts in a specific format.
* Also, it provides clarity and readability. This approach prioritizes clarity and readability of the code, making it easier to understand and maintain. By breaking down the process into separate methods, the code becomes more comprehensible and accessible to developers.
* Lastly, is a balance of complexity and efficiency. May not be the most optimized solution in terms of performance, but it provides a reasonable trade-off between computational overhead and development effort. The use of predefined arrays for digit-to-word mapping simplifies the implementation while maintaining runtime efficiency.

Reasons Against Other Possible Solutions:

* The reason against other possible solutions is because although recursion offers a solution for breaking down the number into smaller parts, it may lead to increased memory usage and potential stack overflow errors, especially for large numbers.
* Also, using iterative approach with lookup tables could provide efficient digit-to-word mapping and avoid recursion-related overhead. However, such method may introduce unnecessary complexity. The use of predefined arrays for digit mapping in the selected approach offers a simpler and more transparent solution without sacrificing performance significantly.