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| Program  9.3 | A positive integer is entered through the keyboard, write a function to find the binary equivalent of this number using recursion.   |  |  |  | | --- | --- | --- | | Sr No | Number | Binary | | 1 | 11 | 1011 | | 2 | 8 | 1000 | | 3 | 5 | 101 | |
| Algorithm: | Step 1: Start.  Step 2: Input the number.  Step 3: Divide the number by 2 through % (modulus operator) and store the remainder in array  Step 4: Divide the number by 2 through / (division operator)  Step 5: Repeat the step 4 until number is greater than 0  Step 6: End |
| Flowchart: |  |

|  |  |
| --- | --- |
| Code: |  |
| Output: |  |
| Question  Answer? | **Mention the advantages of using recursion in a program.**  **Ans:**  1. Recursion adds clarity and (sometimes) reduces the time  needed to write and debug code (but doesn't necessarily  reduce space requirements or speed of execution).  2. Reduces time complexity.  3. Performs better in solving problems based on tree  structure |