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| Write a C program to implement a DFA for the regular expression 1\*2\*3\* using transition table. |
| Algorithm:  Input: A string with characters 1,2 and 3.  Output: Whether the given string is valid or not.  Data structures: Array  Step 1: Initialize a character array and input the string.  Step 2: Declare two integer variables, state and i.  Step 3: Initialize a transition array, transition[3][3]={0,1,2,-1,1,2,-1,-1,2}  Step 4: while input[i]!=’\0’, do  4.1: if input are neither of a and b then set state=-1,break.  4.2: state=transition[state][(input[i]-'1')].  4.3: increment i.  Step 4: if state is equal to final state print valid string else print invalid string.  C:\Users\yesua\Desktop\3.jpg  Output:  5 |