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| Program  8.1 | Help user to identify how strong is his password based on the number of lowercase alphabets, uppercase alphabets, digits and special characters given by the user from the keyboard. Length of entered password(string) should be of 8.  Constraints for identifying strength of password:  1. Strong: Mixture of lowercase alphabets, uppercase alphabets, digits and special characters  2. Average: Mixture of lowercase alphabets, digits and special characters  3. Poor: Either only has alphabets/digits/special characters |
| Algorithm: | Step 1: Start.  Step 2: Enter the password string p.  Step 3: i=0,no=0,uc=0,lc=0,s=0;  Step 4: If p[i]>=48 && p[i]<=57 then no++  Else if p[i]>=65 && p[i]<=90 then uc++  Else if p[i]>=97&&p[i]<=122 then lc++  Else s++.  Step 5: i++.  If i<=length of p go to step 4.  Else go to step 6.  Step 6: If ((no+uc+lc+s)==i&&no!=0&&uc!=0&&lc!=0&&s!=0) print strong  password  Else if ((lc+no+s)==i&&lc!=0&&no!=0&&s!=0&&uc==0) print average  password  Else print poor password. |
| Flowchart: |  |
| Code: |  |
| Output: |  |

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| Question  Answer? | **Explain the difference between string and character. Also write the syntax for printing character and string.**  **Ans:**  The main difference between Character and String is that Character refers to a single letter, number, space, punctuation mark or a symbol that can be represented using a computer while String refers to a set of characters. In C programming, we  can use char data type to store both character and string values.  A string is a sequence of characters terminated with a null character \0  .....................................................................................................................................  ... For example : char c[] = "c string";  A character is terminated with a null character \0 . ...  For example: char c[] = ‘c’; |