Task 2.6

1. Write a program using for loop to print the following output:

   C
   CS
   CSH
   CSHA
   CSHAR
   CSHARP
   CSHAR
   CSHA
   CSH
   CS
   C

2. Accept your five friend's name in array and sort an array in ascending order by comparing all characters properly.

3. Accept a line from a user and count the number of words coming in the line. Take an example suppose user has given a line as below:

   "I wanna go to the America and meet the president in white house"

   Above line contains 13 words.

4. Accept a line from user and count the number of unique words coming in the line, take an example, suppose user has given a line as below:

   "I wanna go to the America and meet the president in white house"

   Above lines consist only 12 unique words as "the" is repeating twice so would be counted once.

5. Accept a program which will accept your name and then will rewrite it in ascending alphabetical order , take an example user has given name :

   “deepak” then your program will rewrite it “adeekp”.

   “rohit” then your program will rewrite it “hiott”.

6. Accept a line from user and rewrite line in ascending order of words, take an example user has given a below line:

   “I wanna go to the America and meet the president in white house”

   Your program will rewrite it as below:

   “America and go house I in meet president the the to wanna white “

7. Consider a string variable “str” having below data :

   string str = “123456789”
   Display it in below format:

```
      1
    2 3 2
  3 4 5 4 3
4 5 6 7 6 5 4
5 6 7 8 9 8 7 6 5
```

8. Create a 9 digit unique no every time user runs the program in the below pattern:

   AP@2R3G$4

   First, Second, Fifth and Seventh positions have characters.

   Third and Eight positons have any special character from given ranges like

   (!, @, #, $, %, &, *).

   Fourth, Sixth and Ninth positions have digits.

   Hint: Store all character, numbers and listed Special characters in arrays and use random class.