1. A string in C is an array of characters followed by NULL character
2. By using the “” to represent a string. A set of characters are enclosed within double quotes
3. \0 is the zero or NULL character and is normally used to indicate the termination of a character string
4. 6, as you would have to include to NULL character in order to tell the interpretator to terminate
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6. Common use of an array of pointers is to form an array of strings. Each entry in the array is a string but in C it is essentially a pointer. Hence each entry in an array of strings is actually a pointer to the first character of a string
7. ‘\0’ is the null character and is used to terminate strings in C, “\0” represents an empty string
8. We would use string[80] as compared to string[] as an array without a preset size is essentially just a pointer and in order to dynamically set the size of string[] you would need to use the malloc() function
9. The reason is that it does not matter how it was passed. The data type of the string can be specified as either char[] or char\* as in both cases the string is passed or will be returned by address
10. Addresses that holds the value are passed around
11. The strings are stored in the string constant pool and whenever you create a new string object using a new keyword it will be stored in heap memory
12. If \0 is missing, the interpreter will not know when to stop. Hence, it will take in rubbish values as part of the string and will keep going in the memory sequence
13. Scanf will read input until it encounters a white space while gets will read input until it encounters a newline or EOF, end of file, and will not stop reading even if there is a whitespace
14. Strcpy, strcmp, strcat, strlen, strchr
15. The result will be undefined as it is a memory access violation
16. The function strcat() will return a pointer to s1, where the string input is residing
17. Isalnum(), is alpha(), isdigit(),is space(),toupper(),tolower()
18. Toupper() will convert lowercase alphabet to uppercase
19. One way is to use string conversion functions like atoi() or stoi()
20. Sprintf(), sintead of printing into the console like printf, it will store the output on char buffer
21. ???
22. Ragged array is an array of arrays which the member arrays can be of different sizes, producing roqs of jagged edges when visualized in output
23. In a rectangular array, they will always have the same number of columns per row, and in a jagged array each element could have a different length or be null
24. Tolower directly converts the specified character into lowercase, whereas islower() will tell whether or not the character specified is in lowercase
25. ‘g’ is a character declaration and is a standalone, whereas “g”refers to the string g