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Class: BCSE II Sem: First
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Assignment Set: 1 Problem No. 3

Problem Statement: Write a program to generate 1,00,000 random strings of capital letters of length 10 each, without repetitions and store them in a file in character mode one string per line.

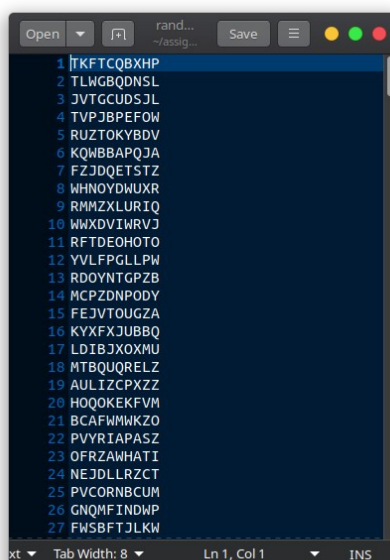
Solution Approach:

A random number generator is used to generate ascii code between 65(A) – 90(Z). It's called 10 times to generate 10 random character (A-Z) and combined to form a string.

Structured Pseudocode:

```
for i=1 to 100000 do:
    s = ""
    for j=1 to 10 do:
        temp = rand()%26 + 65
        append ascii character for value temp to string s
    end for
    print s to the file
end for
end program
```

Results:

A screenshot of a text editor window with a dark blue background. The window title bar shows 'Open', 'Save', and a file icon. The text inside the editor consists of 27 lines, each containing a 10-character string of uppercase letters. The strings are: 1. TKFTCQBXP, 2. TLWGBQDNL, 3. JVTGCUOSJL, 4. TVPJBPFEQW, 5. RUZTOKYBDV, 6. KQWBBAPQJA, 7. FZJDQETSTZ, 8. WHNOYDWUXR, 9. RMMZXLURIQ, 10. WXXDVIWRVJ, 11. RFTDEOHOTO, 12. YVLFPCLLPW, 13. RDOYNTGPZB, 14. MCPZDNPODY, 15. FEJVTUUGZA, 16. KYXFXJUBBQ, 17. LDIBJXOXMU, 18. MTBQUQRELZ, 19. AULIZCPXZZ, 20. HQQKEKFVM, 21. BCAFMMKZO, 22. PVVRIAPASZ, 23. OFRZAWHATI, 24. NEJLLRZCT, 25. PVCORNBCEU, 26. GNMFFINDWP, 27. FWSBFTJLKW. The status bar at the bottom shows 'Tab Width: 8', 'Ln 1, Col 1', and 'INS'.

Discussion

An instance of generated file is shown.

Separate files containing commented source code:
source code assignment5.c is attached .