Q1. Use around 16 built-in functions of string in

program

```
#include <stdio.h>
#include <string.h>
int main() {
 char str1[100] = "Hello, World!";
 char str2[100] = "Hello, C!";
 char str3[100];
 char *ptr;
 // 1. strlen()
 printf("Length of str1: %lu\n", strlen(str1));
 // 2. strcpy()
 strcpy(str3, str1);
 printf("Copied string: %s\n", str3);
 // 3. strcat()
 strcat(str3, " This is a test.");
 printf("Concatenated string: %s\n", str3);
 // 4. strcmp()
 printf("Comparison of str1 and str2: %d\n", strcmp(str1, str2));
 // 5. strncmp()
 printf("Comparison of first 5 characters of str1 and str2: %d\n",
strncmp(str1, str2, 5));
 // 6. strchr()
 ptr = strchr(str1, 'W');
 printf("Character 'W' found at: %s\n", ptr);
 // 7. strrchr()
 ptr = strrchr(str1, 'o');
 printf("Last occurrence of 'o' found at: %s\n", ptr);
 // 8. strstr()
 ptr = strstr(str1, "World");
```

```c
    printf("Substring 'World' found at: %s\n", ptr);
    // 9. strdup()
    char *duplicate = strdup(str1);
    printf("Duplicated string: %s\n", duplicate);
    free(duplicate);
    // 10. strlwr()
    printf("String in lowercase: %s\n", strlwr(str1));
    // 11. strupr()
    printf("String in uppercase: %s\n", strupr(str1));
    // 12. strrev()
    printf("Reversed string: %s\n", strrev(str1));
    // 13. strset()
    strset(str1, 'x');
    printf("String with all characters set to 'x': %s\n", str1);
    // 14. strnset()
    strnset(str1, 'y', 5);
    printf("First 5 characters set to 'y': %s\n", str1);
    // 15. strncat()
    strncat(str1, str2, 5);
    printf("Concatenated string with 5 characters from str2: %s\n", str1);
    // 16. strtok()
    char *token = strtok(str1, ", ");
    while (token != NULL) {
    printf("Token: %s\n", token);
    token = strtok(NULL, ", ");
    }
    return 0;
}
```