

2. Implement a C Program to Check for a valid String

Code

```
#include <stdio.h>
#include <ctype.h> // for isalnum()

int main() {
    char str[] = "Hello123"; // fixed string to test
    int i, valid = 1;

    // Check each character
    for (i = 0; str[i] != '\0'; i++) {
        if (!isalnum(str[i])) { // not a letter or digit
            valid = 0;
            break;
        }
    }

    // Display result
    printf("String: %s\n", str);
    if (valid)
        printf("Valid String\n");
    else
        printf("Invalid String\n");

    return 0;
}
```

Output

main.c		Run	Output
<pre>1 #include <stdio.h> 2 #include <ctype.h> // for isalnum() 3 4 int main() { 5 char str[] = "Hello123"; // fixed string to test 6 int i, valid = 1; 7 8 // Check each character 9 for (i = 0; str[i] != '\0'; i++) { 10 if (!isalnum(str[i])) { // not a letter or digit 11 valid = 0; 12 break; 13 } 14 } 15 16 // Display result 17 printf("String: %s\n", str); 18 if (valid) 19 printf("Valid String\n"); 20 else 21 printf("Invalid String\n"); 22 23 return 0; 24 }</pre>	String: Hello123 Valid String ==== Code Execution Successful ===		