

Expno.3

Design a lexical Analyzer to find the number of whitespaces and newline characters

```
#include<stdio.h>
```

```
#include <stdio.h>
```

```
#include <string.h>
```

```
int main() {
```

```
    char str[1000];
```

```
    printf("Enter a string: ");
```

```
    fgets(str, 1000, stdin);
```

```
    int whitespaces = 0;
```

```
    int newlines = 0;
```

```
    int len = strlen(str);
```

```
    for (int i = 0; i < len; i++) {
```

```
        if (str[i] == ' ') {
```

```
            whitespaces++;
```

```
        } else if (str[i] == '\n') {
```

```
            newlines++;
```

```
        }
```

```
    }
```

```
    printf("Number of whitespaces: %d\n", whitespaces);
```

```
    printf("Number of newline characters: %d\n", newlines);
```

```
    return 0;
```

```
}
```

```
#include <stdio.h>
```

```
#include <string.h>
```

```
int main() {  
    char str[1000];  
    printf("Enter a string: ");  
    fgets(str, 1000, stdin);  
  
    int whitespaces = 0;  
    int newlines = 0;  
    int len = strlen(str);  
  
    for (int i = 0; i < len; i++) {  
        if (str[i] == ' ') {  
            whitespaces++;  
        } else if (str[i] == '\n') {  
            newlines++;  
        }  
    }  
}  
  
printf("Number of whitespaces: %d\n", whitespaces);  
printf("Number of newline characters: %d\n", newlines);  
  
return 0;  
}
```

```
#include <stdio.h>  
#include <string.h>
```

```
int main() {  
    char str[1000];  
    printf("Enter a string: ");  
    fgets(str, 1000, stdin);  
  
    int whitespaces = 0;
```

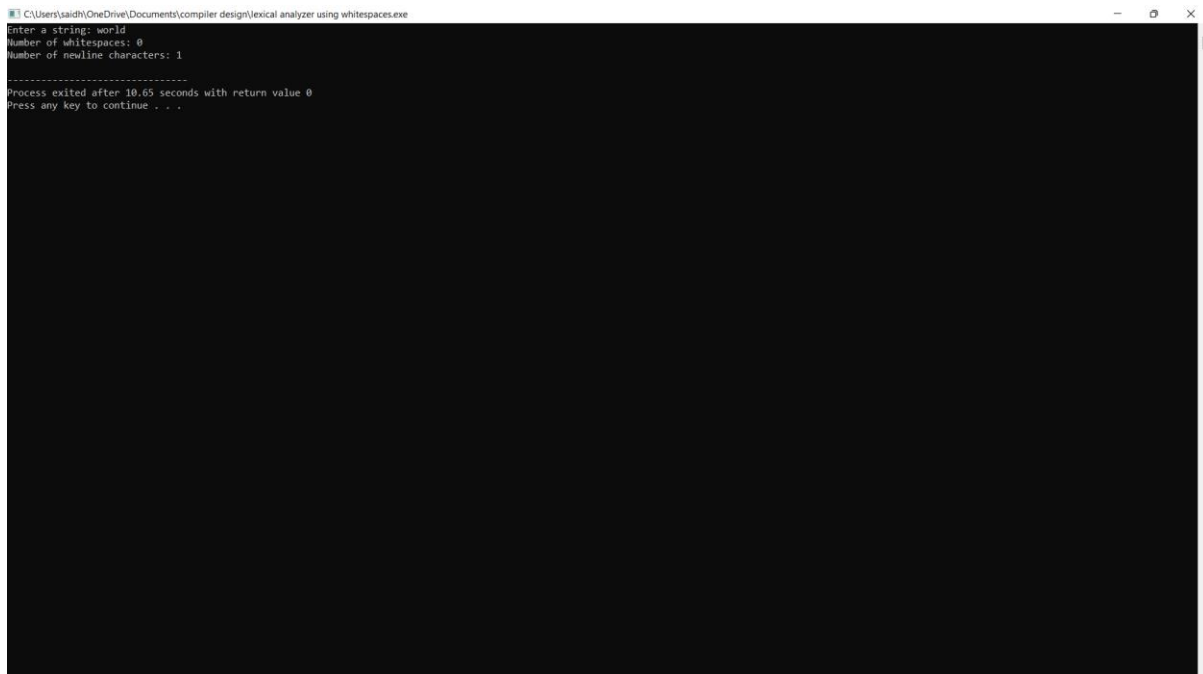
```
int newlines = 0;

int len = strlen(str);

for (int i = 0; i < len; i++) {
    if (str[i] == ' ') {
        whitespaces++;
    } else if (str[i] == '\n') {
        newlines++;
    }
}

printf("Number of whitespaces: %d\n", whitespaces);
printf("Number of newline characters: %d\n", newlines);

return 0;
}
```



```
C:\Users\saidh\OneDrive\Documents\compiler design\lexical analyzer using whitespaces.exe
Enter a string: world
Number of whitespaces: 0
Number of newline characters: 1
-----
Process exited after 10.65 seconds with return value 0
Press any key to continue . . .
```