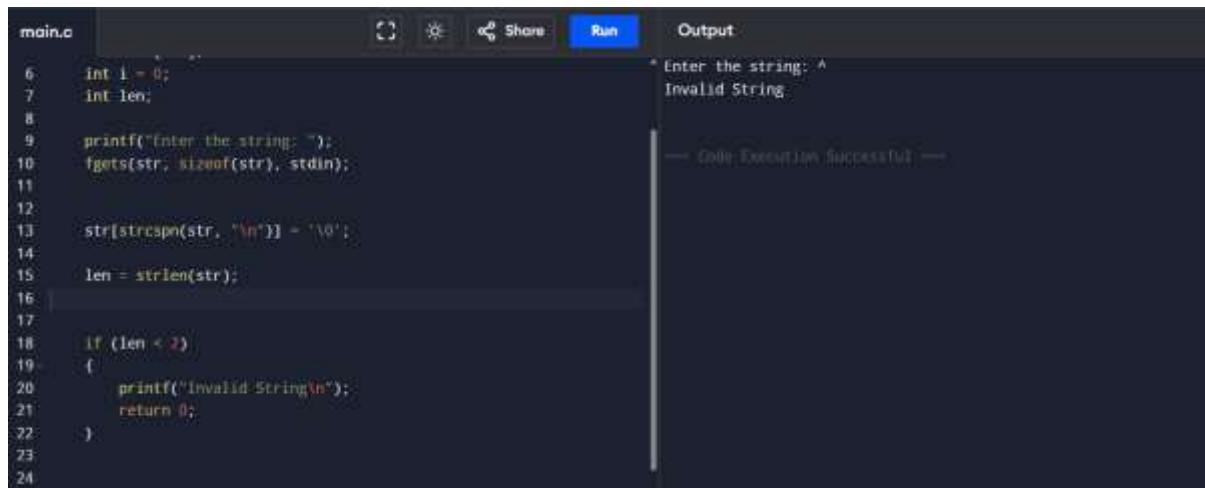


PRACTICAL:1definition:

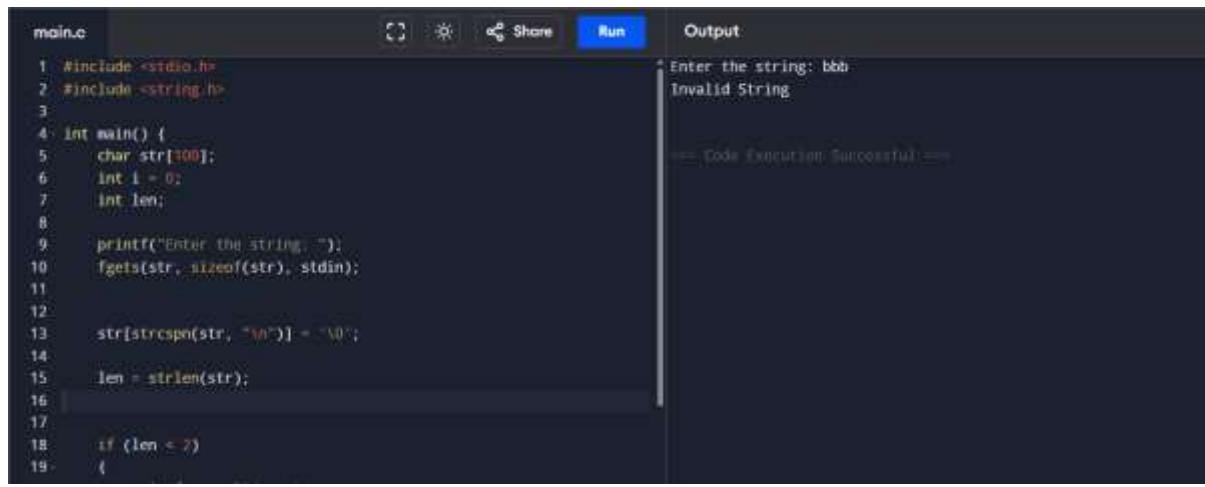
String Validation Against Regular Expression

Ex:1



```
main.c
1 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char str[100];
6     int i = 0;
7     int len;
8
9     printf("Enter the string: ");
10    fgets(str, sizeof(str), stdin);
11
12    str[strcspn(str, "\n")] = '\0';
13
14    len = strlen(str);
15
16
17    if (len < 2)
18    {
19        printf("invalid String\n");
20        return 0;
21    }
22
23
24 }
```

Ex:2



```
main.c
1 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char str[100];
6     int i = 0;
7     int len;
8
9     printf("Enter the string: ");
10    fgets(str, sizeof(str), stdin);
11
12    str[strcspn(str, "\n")] = '\0';
13
14    len = strlen(str);
15
16
17    if (len < 2)
18    {
19        printf("invalid String\n");
20        return 0;
21    }
22
23
24 }
```

Ex:3

The screenshot shows a code editor window with a dark theme. The left pane displays the code for 'main.c'. The right pane shows the 'Run' and 'Output' tabs. The output window contains the following text:

```
Enter the string: aaa
Invalid String
--- Code Execution Successful ---
```

Ex:4

The screenshot shows a code editor window with a dark theme. The left pane displays the code for 'main.c'. The right pane shows the 'Run' and 'Output' tabs. The output window contains the following text:

```
Enter the string: baaabb
Invalid String
--- Code Execution Successful ---
```

Ex:5

The screenshot shows a code editor window with a dark theme. The left pane displays the code file `main.c`. The right pane shows the output of the program's execution.

```
main.c
1 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char str[100];
6     int i = 0;
7     int len;
8
9     printf("Enter the string: ");
10    fgets(str, sizeof(str), stdin);
11
12    str[strcspn(str, "\n")] = '\0';
13
14    len = strlen(str);
15
16    if (len < 2)
17    {
18        printf("Invalid String\n");
19    }
20}
```

The output window shows the following text:

```
Enter the string: aaabbb
Invalid String
--- Code Execution Successful ---
```

Ex:6

The screenshot shows a code editor window with a dark theme. The left pane displays the code file `main.c`. The right pane shows the output of the program's execution.

```
main.c
1 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char str[100];
6     int i = 0;
7     int len;
8
9     printf("Enter the string: ");
10    fgets(str, sizeof(str), stdin);
11
12    str[strcspn(str, "\n")] = '\0';
13
14    len = strlen(str);
15
16    if (len < 2)
17    {
18        printf("Invalid String\n");
19        return 0;
20    }
21}
```

The output window shows the following text:

```
Enter the string: aaab
Invalid String
--- Code Execution Successful ---
```

Ex:7

The screenshot shows a code editor window with a dark theme. The left pane displays the code file `main.c`. The right pane shows the `Output` of the program's execution.

```
main.c
1 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char str[100];
6     int i = 0;
7     int len;
8
9     printf("Enter the string: ");
10    fgets(str, sizeof(str), stdin);
11
12    str[strcspn(str, "\n")] = '\0';
13
14    len = strlen(str);
15
16    if (len < 2)
17    {
18        printf("Invalid String\n");
19        return 0;
20    }
21
22 }
```

Output:

```
Enter the string: abbabb
Invalid String
--- Code Execution Successful ---
```

Ex:8

The screenshot shows a code editor window with a dark theme. The left pane displays the code file `main.c`. The right pane shows the `Output` of the program's execution.

```
main.c
1 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char str[100];
6     int i = 0;
7     int len;
8
9     printf("Enter the string: ");
10    fgets(str, sizeof(str), stdin);
11
12    str[strcspn(str, "\n")] = '\0';
13
14    len = strlen(str);
15
16    if (len < 2)
17    {
18        printf("Invalid String\n");
19        return 0;
20    }
21
22
23    while (str[i] == 'a')
24    {
25        i++;
26    }
27
28    if (i > len)
29    {
30        printf("Valid String\n");
31    }
32 }
```

Output:

```
Enter the string: abbabb
Valid String
--- Code Execution Successful ---
```

Ex:9

The screenshot shows a code editor interface with a dark theme. On the left is the code editor pane containing a file named 'main.o' with the following C code:

```
1 #include <csdio.h>
2 #include <string.h>
3
4 int main()
5 {
6     char str[100];
7     int i = 0;
8     int len;
9
10    printf("Enter the string: ");
11    fgets(str, sizeof(str), stdin);
12
13    str[strcspn(str, "\n")] = '\0';
14
15    len = strlen(str);
16
17    if (len < 2)
18    {
19        printf("Invalid String\n");
20        return 0;
21    }
22}
```

At the top of the editor, there are several tabs: 'File', 'Edit', 'Run', 'Share', and 'Output'. The 'Run' tab is currently selected. To the right of the code editor is the 'Output' pane, which displays the following text:

```
Enter the string: assaabbb
Valid String
--- Code Execution Successful ---
```