

RABIN-KARP ALGORITHM

C Implementation

BEST CASES:

1.

Text: "ababcbcbdbdb"

Pattern: "abc"

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> cd "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\" ; if ($?) { gcc rk_c_s.c -o rk_c_s } ; if ($?) { .\rk_c_s }  
Indices where pattern occurs:  
Pattern found at index: 2
```

2.

Text: "I am R.Soumika".

Pattern: "Soumika"

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> cd "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\" ; if ($?) { gcc rk_c_s.c -o rk_c_s } ; if ($?) { .\rk_c_s }  
Indices where pattern occurs:  
Pattern found at index: 7
```

WORST CASES:

1.

Text: "hello"

Pattern: "foo"

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> cd "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\" ; if ($?) { gcc rk_c_s.c -o rk_c_s } ; if ($?) { .\rk_c_s }  
Indices where pattern occurs:  
Pattern not found
```

2. Text: "The girl is good"

Pattern: "boy"

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> cd "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\" ; if ($?) { gcc
rk_c_s.c -o rk_c_s } ; if ($?) { .\rk_c_s }
Indices where pattern occurs:
Pattern not found
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> █
```

CORNER CASES:

1.

Text: "Hello"

Pattern: " "

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> cd "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\" ; if ($?) { gcc
rk_c_s.c -o rk_c_s } ; if ($?) { .\rk_c_s }
Pattern file is empty.
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> █
```

2.

Text: " "

Pattern : "Hi"

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> cd "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\" ; if ($?) { gcc
rk_c_s.c -o rk_c_s } ; if ($?) { .\rk_c_s }
Error: Text file is empty or could not be read.
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> █
```