

RABIN-KARP ALGORITHM

Python Implementation

BEST CASES:

1.

Text: "ababcbcbdbdb"

Pattern: "abc"

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> python -u "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\rk_python_.py"
Text: ababcbcbdbdb
Pattern: abc
Indices where pattern occurs:
Pattern found at index: 2
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode>
```

2.

Text: "I am R.Soumika".

Pattern: "Soumika"

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> python -u "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\rk_python_.py"
Text: I am R.Soumika
Pattern: Soumika
Indices where pattern occurs:
Pattern found at index: 7
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode>
```

WORST CASES:

1.

Text: "hello"

Pattern: "foo"

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> python -u "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\rk_python_
s.py"
Text: hello
Pattern: foo
Indices where pattern occurs:
Pattern not found in the text
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> █
```

2. Text: "The girl is good"

Pattern: "boy"

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> python -u "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\rk_python_
s.py"
Text: The girl is good
Pattern: boy
Indices where pattern occurs:
Pattern not found in the text
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> █
```

CORNER CASES:

1.

Text: "Hello"

Pattern: " "

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> python -u "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\rk_python_
s.py"
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> python -u "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\rk_python_
s.py"
Text file is empty.
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> █
```