RABIN-KARP ALGORITHM

C++ Implementation

BEST CASES:

1.

Text: "ababcbcdbdb"

Pattern: "abc"

Output:

```
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> cd "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\" ; if ($?) { g++
 rk_cpp_s.cpp -o rk_cpp_s } ; if ($?) { .\rk_cpp_s }
Text: ababcbcdbdb
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> cd "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\" ; if ($?) { g++
 rk_cpp_s.cpp -o rk_cpp_s } ; if ($?) { .\rk_cpp_s }
Text: I am R.Soumika
Pattern: Soumika
Indices where pattern occurs:
Pattern found at index: 5
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode>
```

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 ($?) { g++
 rk_cpp_s.cpp -o rk_cpp_s } ; if ($?) { .\rk_cpp_s }
Text: hello
Pattern: foo
Indices where pattern occurs:
Pattern "foo" does not exist in the given 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> cd "c:\Users\sauda\OneDrive\Desktop\DAA\.vscode\" ; if ($?) { g++
 rk_cpp_s.cpp -o rk_cpp_s } ; if ($?) { .\rk_cpp_s }
Text: The girl is good
Pattern: boy
Indices where pattern occurs:
Pattern "boy" does not exist in the given text.
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 ($?) { g++
 rk_cpp_s.cpp -o rk_cpp_s } ; if ($?) { .\rk_cpp_s }
Text: Hello
Pattern:
Indices where pattern occurs:
Error: Text or pattern 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 ($?) { g++
 rk_cpp_s.cpp -o rk_cpp_s } ; if ($?) { .\rk_cpp_s }
Text:
Pattern: hi
Indices where pattern occurs:
Error: Text or pattern is empty.
PS C:\Users\sauda\OneDrive\Desktop\DAA\.vscode> []
```