Rabin-Karp

The following diagram presents
the flow of Rabin-Karp hash
based search

Find

Start
(string input, string
pattern)

hashInput =0;
hashPattern =
Hash(pattern)

i < input.Length - pattern.Length + 1

Yes
(reached end
without getting
pattern index)

return -1

No

hashInput =
Hash(input.Substring(i),
pattern.Length)

hashInput == hashPattern
AND
input[i..i+pattern.Length] == pattern

No

Yes

return i
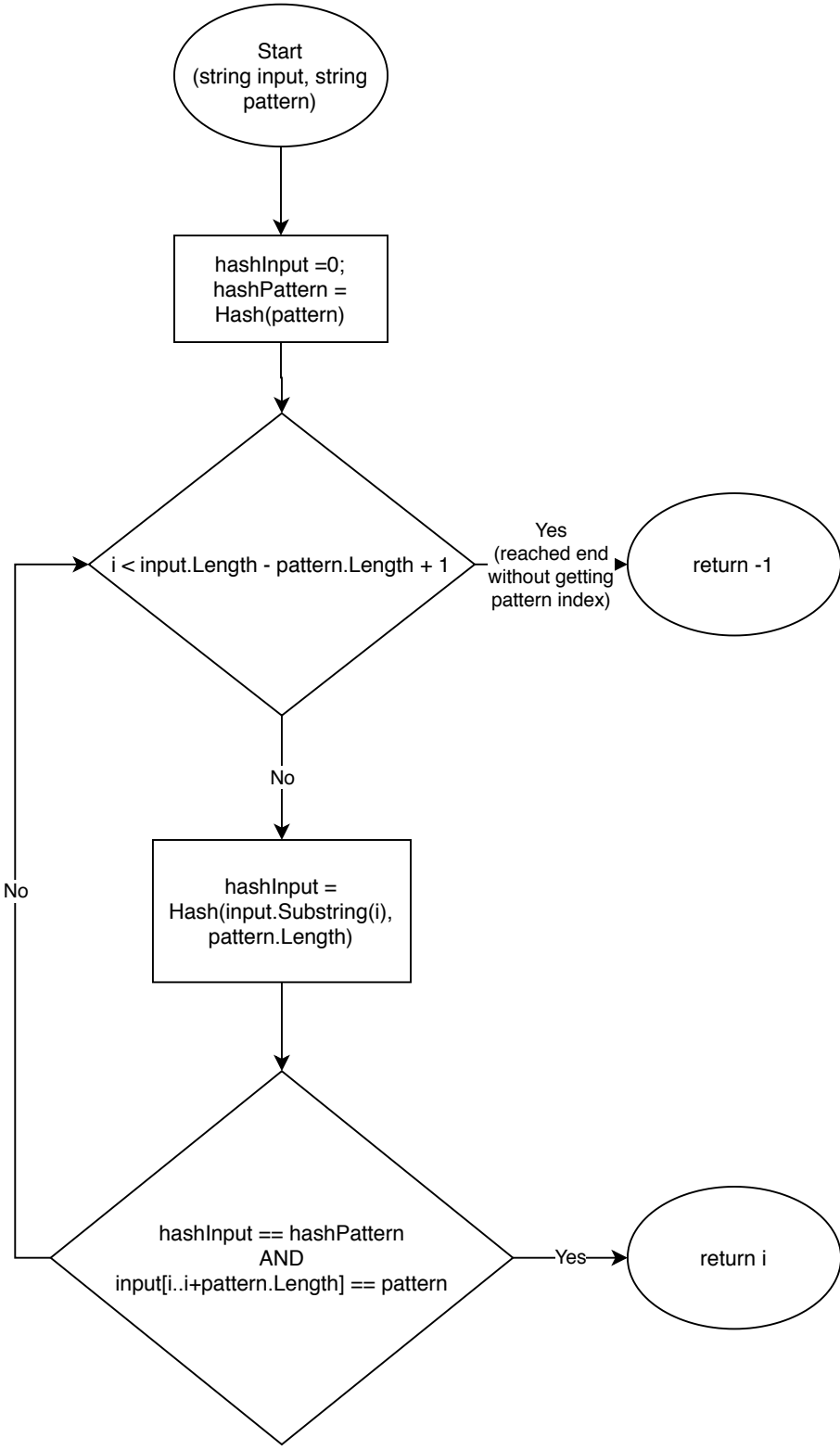
Hash
Func

For every character C in string:
HashValue += (256 + C) mod 101