* Sequence of characters.
* Small set .
* Contiguous values (a(97 ascii) to Z).(A(65) to Z).
* In Java char is 16bit UTF-16. Unicode Transformation Format (UTF) includes 128 ASCII char and other chars for different languages.
* String creation in java : Char[] ,String class, StringBuffer,StringBuilder
* String is immutable.

String s1=”abc”;

String s2=”abc”;

S1==S2 true as single object is created in memory.

ASCII characters :

Lowercase chars :97-122

Uppercase chars:65-90

Numbers :48-57

Pattern Searching: n is string , m is pattern

* Naïve : O(n-m+1)\*m No Preprocessing
* Naïve when pattern has all distinct chars : O(n) No Preprocessing
* Rabin Karp: Preprocess pattern O(n-m+1)\*m Rolling hash (Computes hash of window in runtime by removing last character and adding new character in wndow) .Is used when we want to search multiple pattern in text.
* KMP :O(n) Preprocess pattern -: LPS array for pattern(Longest prefix which is also suffix)-
* Suffix Tree : O(n) Preprocess text---- Trie

Proper Prefix :Prefix Excluding original string .E.g“abc”= “”,”a”,”ab”