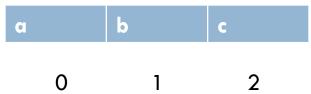
String is a collection of characters whose memory
 Will allocates on the heap.



string s1 = @"D:/Sample/ConsoelAPp"

System. String is a predefined namespace for strings.

- In c#.net strings are two types
  - Immutable string
  - Mutable string
- Immutable strings:
  - Immutable strings are fixed length in size.
  - Immutable string memory will not change dynamically.
  - Immutable strings are declared using string data type

- Methods of System.String class
- copy()-it copy one string into another
  - String. Copy(value)
- concat()-it concats two strings
  - String.Concat(s1,s2)
- compare()-it compare two strings if strings are equal it returns 0 otherwise it returns +ve or -ve number

```
compare(string s1,string s2,bool ignorecase)
```

if ignorecase is false it compare strings with case sensitive if it is true compare strings with out case sensitive

- Equal(String s)- it compare two strings and return boolean value
- split()-split string into substrings based on separator string []s=s1.split('separator',' separator',....)
- ioin()-it will join the array of strings into one string
  with separator
  string s=string.join('separator', array name)

- indexof("char")-find the index of given char
- indexof("string")-find the index of given string
- contains("substring")-it returns Boolean values the substring exist in the string
- tolower()-return string in lowercase
- toupper()-return string in uppercase
- TocharArray()-it converts string to char array
- replace("old string", "new string")-it replace old string with new string
- replace('old char', 'new char')-it replace old char with new char
- Substring(int index)-it return the substring stating from index to total string.
- Substring(int index,int count)-it return the substring starting from index to given counted chars
- String. Format(format, "string")-it format the string ex:string.format("{0:C}","1234")-\$1234

- □ Formatting strings: used for formatting the output.
  - $\square$  {0:Fn}-To display fixed decimal points n=1,2,....
  - {0:E}-To display output in exponential format
  - {0:C}-To display in currency format-\$123
  - {0:P}-To display in percentage format-123%
  - {0:D}-To display date in long format-March 5 2011
  - $\square$  {0:d}-To display date in small format-02/5/2011
  - {0:T}-To display time in long format-12:23:12
  - {0:t}-To display time in small format-12:23

- Mutable strings: The strings which are dynamic in length and which automatically increases its length.
- Mutable string are recommended in developing projects
- It increases the performance of the application
- We can declare mutable strings using
   StringBuilder class comes with System. Text
   namespace

# String Builder

- Stringbuilder is a predefined class under System. Text namespace
- Stringbuilder useful for appending, removing, replacing, or inserting characters.
- Methods of stringbuilder:
- Append() -Appends string to the end of the current StringBuilder.
- Insert()- Inserts a string or object into the specified index of the current StringBuilder.
  - Insert(int index, string value)
  - Insert(int index, char value)
- Remove() -Removes a specified number of characters from the current StringBuilder.
  - Remove(int startindex,int length)
- Replace()- Replaces a specified character at a specified index.
  - Replace('oldchar','newchar')
  - Replace('oldstring",'newstring');