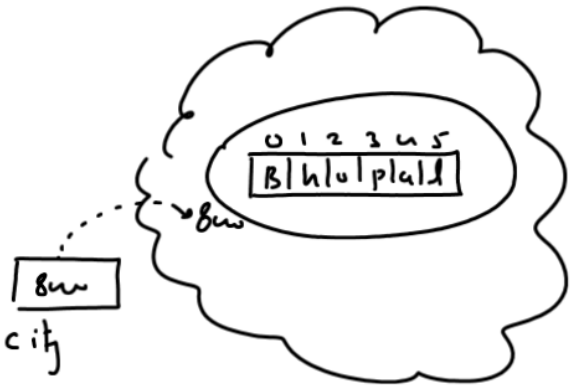
2. charAt():
It is an instance method.
Accepts an int as argument and returns
the character present at that index




```
String city=new String("Bhopal");

System.out.println(city[0]);// Syntax Error

System.out.println(city.charAt(0));//B

System.out.println(city.charAt(3));//p

System.out.println(city.charAt(8));

//Exception: StringIndexOutOfBoundsException
```

3. equals()
==========
1. It is an instance method of String class
2. It compares two String objects and returns true if both the objects contain SAME DATA otherwise it returns false.

```
class Test
{
  public static void main(String [] args)
  {
    String s1=new String("Bhopal");
    String s2=new String("Bhopal");
    String s3=new String("bhopal");
    System.out.println(s1.equals(s2));
    System.out.println(s1.equals(s3));
 }
}
```

Output:
true
false

4. equalsIgnoreCase()
==========
1. It is an instance method of String class
2. It compares two String objects in CASE INSENSITIVE way and returns true if both the objects contain SAME DATA (irrespective of case) otherwise it returns false.

```
class Test
{
   public static void main(String [] args)
   {
     String s1=new String("Bhopal");
     String s2=new String("Bhopal");
     String s3=new String("bhopal");
     System.out.println(s1.equalsIgnoreCase(s2));
     System.out.println(s1.equalsIgnoreCase(s3));
  }
}
```

Output:

true

true

DECISION CONTROL STATEMENTS
==========

Java provides following DECISION CONTROL STATEMENTS:

a. if
b. if..else
c. if...else if...else
d. nested if
e. switch
f. ternary operator

1. Syntax of if

```
if (test_cond)
{
    stmt;
}
```

2. Syntax of if..else

```
if (test_cond)
{
    stmt;
}
else
{
   stmt;
}
```

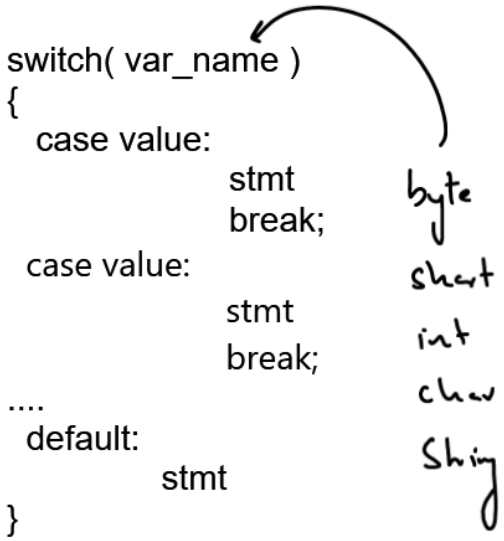
3.Syntax of if..else if..else

```
if (test_cond)
{
    stmt;
}
else if (test_cond)
{
    stmt;
}
else
{
   stmt;
}
```

4. Syntax Of nested if

```
if (test_cond)
{
    if(test_cond)
     {
          stmt;
     }
    else
     {
          stmt;
     }
}
```

Using The switch statement



```
switch( var_name )
{
   case value: case value:
                                  stmt
                                  break;
  case value: case value:
                                  stmt
                                  break;
....
  default:
              stmt
}
```

Ternary Operator

==========

Syntax:

======

```
var_name= (test_cond) ? (true_stmt) : ( false_stmt);
```

C:

===

```
(a%2==0)?printf("Even no"):printf("Odd no");
```

Java: (Wrong Way)

===

```
(a%2==0)?SOP("Even no"):SOP("Odd no");
```

Correct Way
==========

```
class EvenOdd
{
      public static void main(String [] args)
      {
       int a;
       a=Integer.parseInt(args[0]);
       String result;
       result=(a%2==0)?"Even":"Odd";
       System.out.println(result);

      }
}
```