1. Finalise method is called at the time of garbage collection
2. == and equals: == compares the primitives while equals compares the object.
3. Static methods can be called directly using the classname without creating instance of the class.
4. Detect and debug exceptions using try and catch block.
5. I will use Base64encoder.
6. Convert text into Unicode
7. Block 1 is static, will be loaded with class. Value of a is always 5 while value of b will be 0 at the time of loading.
8. Float
9. B and D
10. D
11. F
12. C
13. C
14. Problem solving:

forename

InStr('JONES,NICK', ',',1)//6

SubStr ('JONES,NICK’,6) ->NICK

Surname

InStr('JONES,NICK', ',',-1)//5

SubStr ('JONES,NICK’,5,1) ->JONES

public String forename(String fullname){

int position= InStr(fullname, ',',1);

return SubStr (fullname,position);

}

public String surname(String fullname){

int position= InStr(fullname, ',',-1);

return SubStr (fullname,position,1);

}

1. SQL:
2. Groupby is used to group a set of entities based on one or more parameters.
3. Orderby is used to sort the table in ascending or descending order
4. Having can be used before groupby to add certain logical conditions.
5. Minus is used as a mathematical operator.
6. Inner join is also left join when the reference table is maintained at the left side to match other tables. Outer join is vice versa
7. Deadlock is a situation where we wait for an entity which is already occupied by another.Using transaction management, we can avoid deadlocks.
8. Best practice of query optimization is adding indexes.
9. We can create own indexes for sorting related stuff.
10. Programming:

public Class Node{

Node newNode;

int position;

Node(newNode, position)

}

public class Element{

addObject(Node n, int pos){

if(n.length ==pos)// return

if(n.length >pos)//exception

if(n.length <pos)//insert element

}

1. XML/HTML

a) XML Extensible markup language: It is file used over protocols to display the content in readable format

b) XSD is schema definition, kind of a template used for formatting document.

c) ordinality

d) <table><th><td><tr></tr>><tr></tr></td>><td><tr></tr>><tr></tr></td></th></table>

e) cascading style sheet- styling sheet to define the view of a page.

7. Analysis

a) What approach would you use for collecting and documenting user requirements? UML diagram

b) What are use cases? Understanding the requirements and sequence of events.

c) Describe a simple use case.

1. Prepare UML diagram

2. We can create sequence diagram using the models in 1.

3. create flow diagram to understand the sequence of events.