**Microsoft SQL Server Interview Questions and Answers**

**What is SQL Server ?**

SQL Server is a DBMS system provided by Microsoft. SQL Server is sometimes mistakenly referred to as SQL.

**Error severity 13 indicates what?**

Transactional deadlock errors.

This level of error severity indicates a transaction deadlock error.

**In which order do you perform an upgrade to SQL Server 2005 for replicated databases?**

Distributor, Publisher, then Subscriber.

You always perform an upgrade in this order: distributor, publisher, subscriber.

How many Service Packs will be released for SQL Server 2005 in 2007?

Explanation: The answer is up in the air and this is more of a poll than a real QOD. Based on the ways things are going, the staff here sees just 1, though our hope would be that 3 or 4 would be released.

**You setup a linked server from a SQL Server 2000 server to your new SQL Server 2005 server (with defaults), however you cannot execute procedures on the 2005 server. Why not?**

You need to enable RPC.

By default, RPC is disabled in SQL Server 2005. You need to set the "remote access option" in your server configuration to 1 to allow the execution of stored procedures from a remote server.

What is the recommended way to send mail from SQLAgent in SQL Server 2005?

Database Mail

You can use either Database Mail or SQLMail with SQL Agent in SQL Server 2005. However since SQLMail will be removed, it is recommended that you use Database Mail.

**When you create a new Message Type in the SQL Server 2005 Service Broker, what does the Authorization parameter signify?**

The owner of the message type.

This parameter determines the owner of the message type. This defaults to the current user.

**What the heck does ATN2 do?**

The angle between the x-axis and a ray.

This is a mathematical function that returns the angle between the positive x-axis and the ray that passes through the two coordinates passed in. The angle is in radians.

How does a differential backup know which extents have changed so that it can be very quickly run?

The DCM tracks changes. The differential backup reads the extents from this structure.

A differential backup uses the Differential Change Map to determine which extents have changed and need to be include in the backup. This greatly speeds the differential backup process.

**If you run this, what does it return?**

select applock\_mode('public', 'SalesApp', 'Transaction')

The type of lock being held by an application that requested it.

This command returns the lock mode held by an application that was requested with the sp\_getapplock procedure.

insert mytable select ''

insert mytable select ' '

select \* from mytable where mychar = ''

select \* from mytable where mychar = ' '

**How many rows are returned by these two select statements?**

2 and 2

Each select statement actually returns 2 rows. You can use this script to check this:

create table mytable

( id int identity(1,1)

, mychar varchar(20)

)

go

insert mytable select null

insert mytable select ''

insert mytable select ' '

go

set ansi\_nulls on

set ansi\_null\_dflt\_on on

select \* from mytable

where mychar is not null

select \* from mytable

where mychar <> '' and mychar is not null

select \* from mytable

where mychar <> ' ' and mychar is not null

select \* from mytable where mychar = ''

select \* from mytable where mychar = ' '

set ansi\_null\_dflt\_on off

set ansi\_nulls off

go

drop table mytable

**What does the Queue Reader Agent do in SQL Server 2005 replication?**

This agent reads the subscriber logs and moves changes back to the publisher.

This agent is used when the queued update model is chosen with transactional replication. It moves changes from the subscribers back to the publishers.

**What are the three possible functions of the plus (+) operator in SQL Server 2005, the base installed T-SQL?**

Add, string concatenation, unary plus

The three functions are Add, String Concatenation, and Unary Plus.

**The Sort component in SQL Server 2005 Integration Services is what type of component?**

Blocking Transformation

The Sort component is a blocking transformation meaning that it needs all rows in order to perform its function.