New Query

ITI

Execute

SQLQuery4.sql - ME...VER22.ITI (sa (52))*

Object Explorer

Connect

MENNAS-LAPTOP\MSSQLSERVER22 (SQL Server
  Databases
    System Databases
    Database Snapshots
    AdventureWorks2019
    Company_SD
    data_test
    HR
    ITI
  Security
  Server Objects
  Replication
  Always On High Availability
  Management
  Integration Services Catalogs
  SQL Server Agent
  XEvent Profiler

```sql
--1.        Create a scalar function that takes date and returns Month name of that da

create function getmonth(@date date)
returns nvarchar(10)
    begin
    declare @month nvarchar(20)
        set @month =format(@date,'MM')
        return @month
    end
select dbo.getmonth('04-04-1990')
```

100 %

Results | Messages

(No column name)
1	04
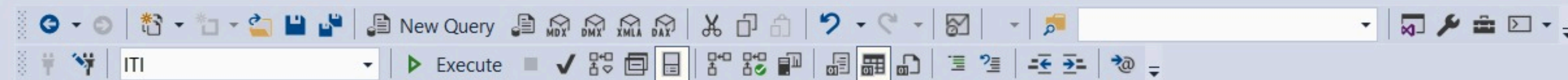
File   Edit   View   Query   Project   Tools   Window   Help

ITI

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Object Explorer

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SQLQuery4.sql - ME...VER22.ITI (sa (52))*

```sql
11
12   --2.      Create a multi-statements table-valued function that takes 2 integers and returns the values between them.
13
14 create function getvalues(@fvalue int , @svalue int)
15   returns @t table
16   (
17       betweenvalue int
18   )
19        as
20        begin
21            while @fvalue+1<@svalue
22            begin
23            set @fvalue+=1
24            insert into @t
25            select @fvalue
26            end
27            return
28        end
29
30   select * from  dbo.getvalues(10,20)
```
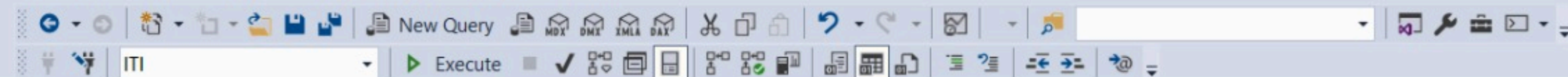
100 %

Results   Messages

	betweenvalue
1	11
2	12
3	13
4	14
5	15
6	16
7	17
8	18
9	19

File   Edit   View   Query   Project   Tools   Window   Help

Object Explorer

Connect

MENNAS-LAPTOP\MSSQLSERVER22 (SQL Server
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  Management
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  SQL Server Agent
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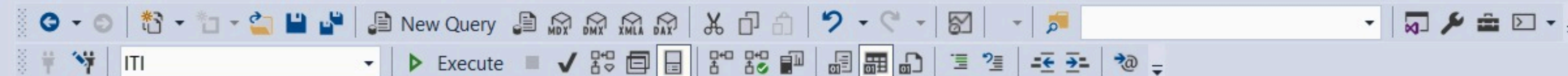
```sql
23                set @fvalue+=1
24                insert into @t
25                select @fvalue
26             end
27             return
28          end
29
30    select * from  dbo.getvalues(10,20)
31
32    --3.    Create inline function that takes Student No and returns Department Name with Student full name.
33
34    create function getdeptname(@st_no int)
35    returns table
36          as return(
37             select Dept_Name
38             from Student inner join Department
39             on Student.Dept_Id=Department.Dept_Id and Student.St_Id =@st_no
40          )
41    select * from  dbo.getdeptname(1)
42
```

100 %

Results   Messages

	Dept_Name
1	SD

```sql
--4.    Create a scalar function that takes Student ID and returns a message to user
--a.    If first name and Last name are null then display 'First name & last name are null'
--b.    If First name is null then display 'first name is null'
--c.    If Last name is null then display 'last name is null'
--d.    Else display 'First name & last name are not null'

create function getmsg(@st_id int)
returns nvarchar(50)
    begin
    declare @msg nvarchar(50)
    declare @fname nvarchar(20)
    declare @lname nvarchar(20)
    select @fname=st_fname , @lname=St_Lname from student where St_Id = @st_id
    if @fname is null and @lname is null
    set @msg ='First name & last name are null'
    else if @fname is null and @lname is not null
    set @msg ='first name is null'
    else if @fname is not null and @lname is null
    set @msg ='last name is null'
    else
    set @msg ='First name & last name are not null'
        return @msg
    end
select dbo.getmsg(14) as msg
select dbo.getmsg(13)  as msg
```

Results

	msg
1	first name is null

	msg
1	last name is null

File   Edit   View   Query   Project   Tools   Window   Help

ITI   ▷ Execute

Day6 demo.sql - ME...VER22.ITI (sa (64))   SQLQuery4.sql - ME...V

```sql
68
69
70  --6.    Create multi-statements table-valued function that takes a string
71  --If string='first name' returns student first name
72  --If string='last name' returns student last name
73  --If string='full name' returns Full Name from student table
74  --Note: Use ♦ISNULL♦ function
75
76  create function getstname(@string nvarchar(50))
77  returns @t table
78  (
79      studentName nvarchar(50)
80  )
81      as
82      begin
83      if @string ='first name'
84              insert into @t
85              select isnull(St_Fname,'Fname') from Student
86      else if @string ='last name'
87              insert into @t
88              select isnull(St_Lname,'Lname') from Student
89      else if @string ='full name'
90              insert into @t
91              select isnull(St_Fname+' '+St_Lname,'Fullname')  from Student
92          return
93      end
94
95  select * from  dbo.getstname('first name')
96  select * from  dbo.getstname('last name')
97  select * from  dbo.getstname('full name')
98
99  --7.    Write a query that returns the Student No and Student first name without the last char
100
```

47 %

Results   Messages

	studentName
1	Ahmed
2	Amr
3	Mona
4	Ahmed
5	Khalid
6	Heba

	studentName
1	Hassan
2	Magdy
3	Saleh
4	Mohamed
5	Moahmed
6	Farouk

	studentName
1	Ahmed Hassan
2	Amr Magdy
3	Mona Saleh
4	Ahmed Moha...
5	Khalid Moah...
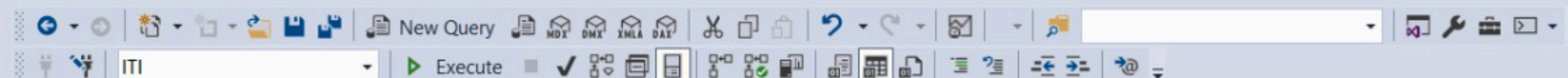
Object Explorer

Connect ▾

- MENNAS-LAPTOP\MSSQLSERVER22 (SQL Ser
  - Databases
    - System Databases
    - Database Snapshots
    - AdventureWorks2019
    - Company_SD
    - data_test
    - HR
    - ITI
      - Database Diagrams
      - Tables
        - System Tables
        - FileTables
        - External Tables
        - Graph Tables
        - dbo.Course
        - dbo.Department
        - dbo.dept
        - dbo.emp
        - dbo.Ins_Course
        - dbo.Instructor
        - dbo.Stud_Course
        - dbo.Student
        - dbo.Topic
        - Dropped Ledger Tables
      - Views
      - External Resources
      - Synonyms
      - Programmability
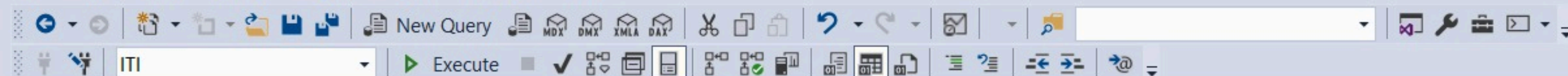   - Service Broker
      - Storage
      - Security
  - Security
  - Server Objects
  - Replication

```sql
                                    select isnull(St_Lname,'Lname') from Student
                else if @string ='full name'
                            insert into @t
                            select isnull(St_Fname+' '+St_Lname,'Fullname')  from Student
                    return
                end


select * from  dbo.getstname('first name')
select * from  dbo.getstname('last name')
select * from  dbo.getstname('full name')


--7.   Write a query that returns the Student No and Student first name without the last char


select St_Id 'Student No', substring(St_Fname,0,len(St_Fname)) 'Student first name' from student
```

Results

	Student No	Student first name
1	1	Ahme
2	2	Am
3	3	Mon
4	4	Ahme
5	5	Khali
6	6	Heb
7	7	Al
8	8	Mohame
9	9	Sal
10	10	Fad
11	11	Marw
12	12	Noh
13	13	Sai
14	14	NULL
15	402	khalid
16	403	khalid
17	404	khalid

```sql
                else if @string ='full name'
                        insert into @t
                        select isnull(St_Fname+' '+St_Lname,'Fullname')  from Student
                    return
                end


select * from  dbo.getstname('first name')
select * from  dbo.getstname('last name')
select * from  dbo.getstname('full name')

--7.   Write a query that returns the Student No and Student first name without the last char

select St_Id 'Student No', substring(St_Fname,0,len(St_Fname)) 'Student first name' from student

--8.   Wirte query to delete all grades for the students Located in SD Department

delete Stud_Course from Stud_Course
        inner join student on   Stud_Course.St_Id = Student.St_Id
        inner join Department on Department.Dept_Id = Student.Dept_Id
    where Dept_Name='SD'

--9.   Using Merge statement between the following two tables [User ID, Transaction Amount]
```
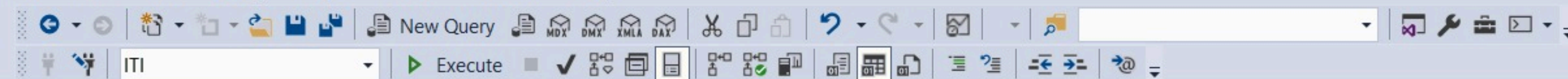
Messages

    (24 rows affected)

    Completion time: 2024-08-10T23:00:47.5195116+03:00

```sql
--8.     Wirte query to delete all grades for the students Located in SD Department

delete Stud_Course from Stud_Course
        inner join student on    Stud_Course.St_Id = Student.St_Id
        inner join Department on Department.Dept_Id = Student.Dept_Id
    where Dept_Name='SD'

--9.    Using Merge statement between the following two tables [User ID, Transaction Amount]

merge into   'last transactions'    as l
        using 'daily transactions'   as d
            ON l.userid = d.userid
        when matched then
            update set l.amount = d.amount
        When not matched by target Then
            insert(userid,amount)
            values(d.userid,d.amount)
        When not matched by Source
            Then delete;
```

Messages

Commands completed successfully.

Completion time: 2024-08-10T23:01:12.3711594+03:00