

UNIVERSIDAD PRIVADA DE TACNA



FACULTAD DE INGENIERIA

Escuela Profesional de Ingeniería de Sistema

Informe de laboratorio 04

Curso: Base de datos II

DOCENTE: Ing. Patrick Cuadros Quiroga

**Alumno: Balcon Coahila, Edwart Juan
(2013046516)**

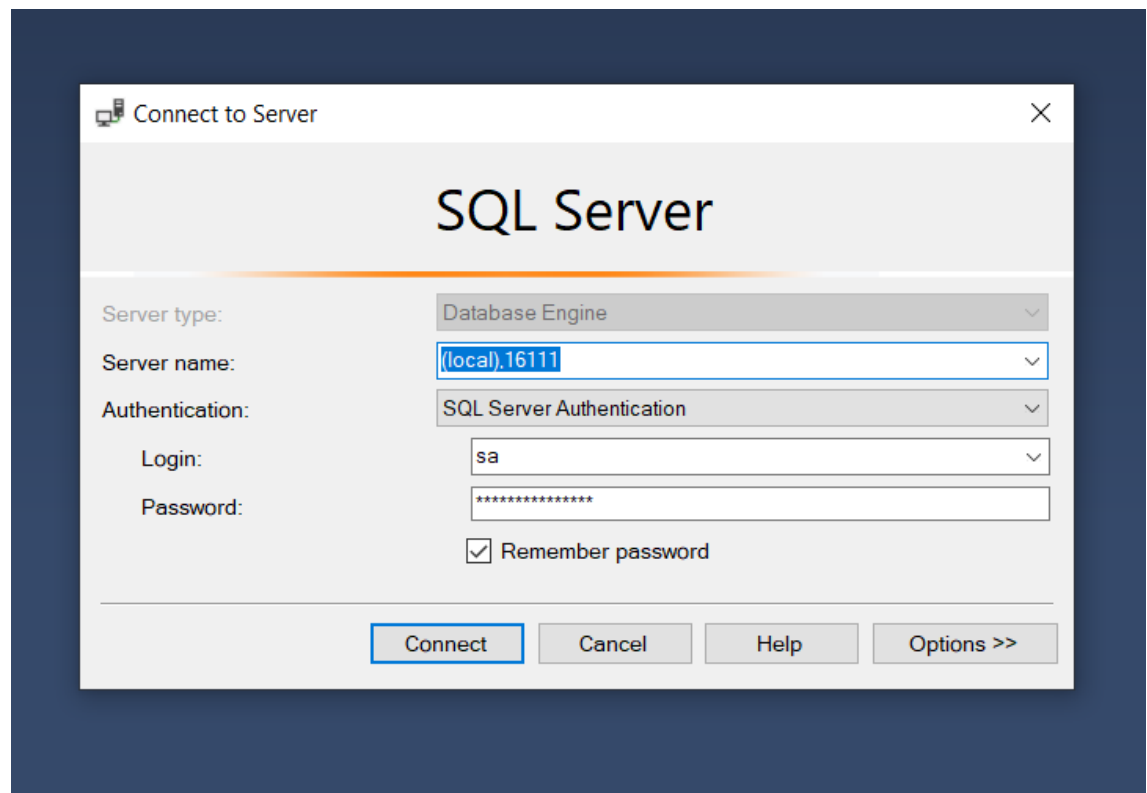
Tacna – Perú

2020

1. Crearemos un contenedor con el siguiente comando luego de tener la imagen del SQL server

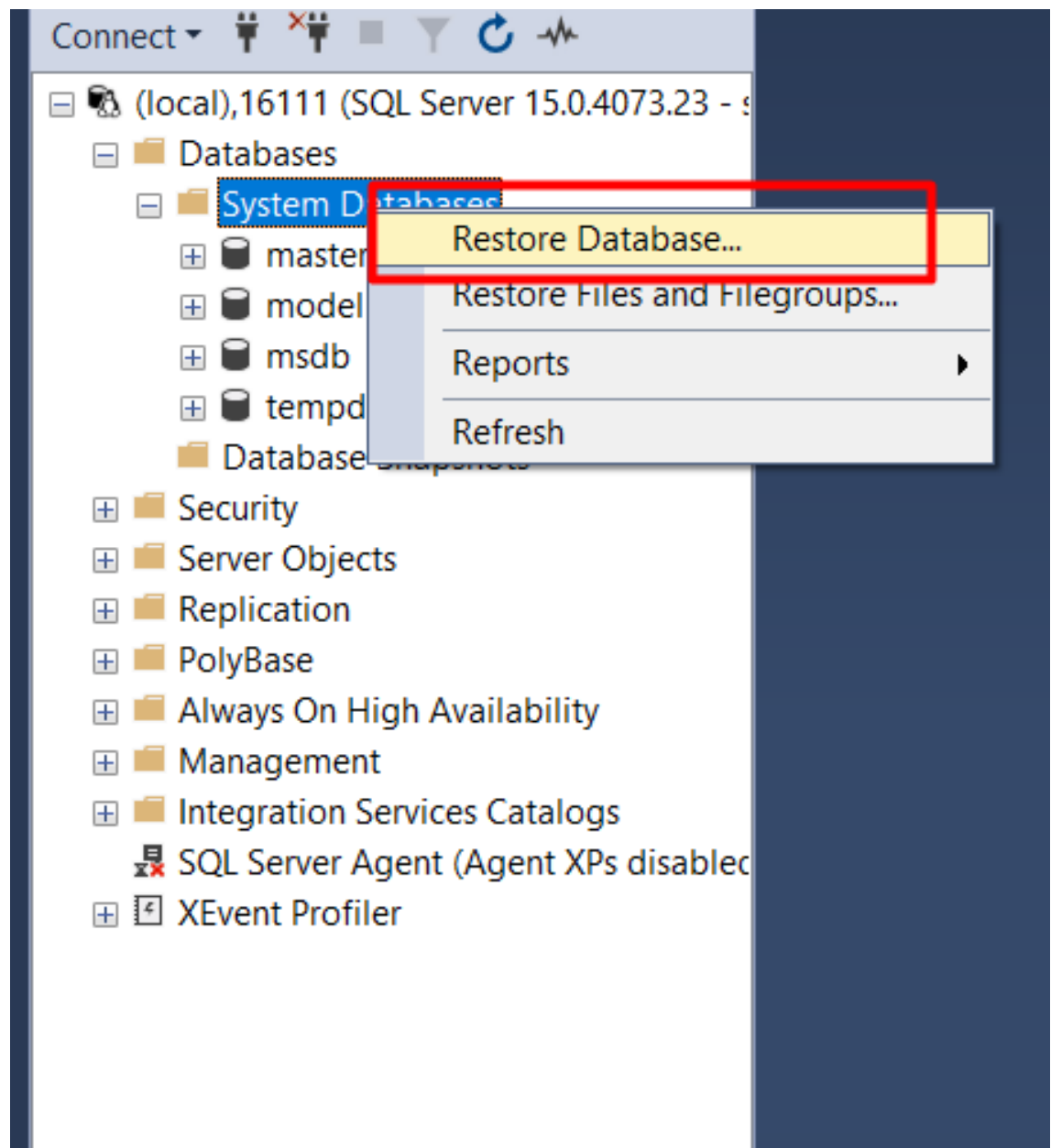
```
PS C:\Windows\system32> docker run -d -p 16111:1433 -e 'ACCEPT_EULA=Y' -e 'SA_PASSWORD=Tacna.2019' --name SQLNX01 mcr.microsoft.com/mssql/server
Unable to find image 'mcr.microsoft.com/mssql/server:latest' locally
latest: Pulling from mssql/server
171857c49d0f: Pull complete
8b5eb8c165f6: Pull complete
e7083eff87ee: Pull complete
61e52f862619: Pull complete
419640447d26: Pull complete
ec9a85cf10f9: Pull complete
Digest: sha256:bf3cc5fb2abfd327c6eeaf2a021869077298511eb6ded5fabd9a1e39ebff7c30
Status: Downloaded newer image for mcr.microsoft.com/mssql/server:latest
25a47c402179a54307ad49572228fa81a4d3f48d1b56ae055657b87a69e436a8
PS C:\Windows\system32>
```

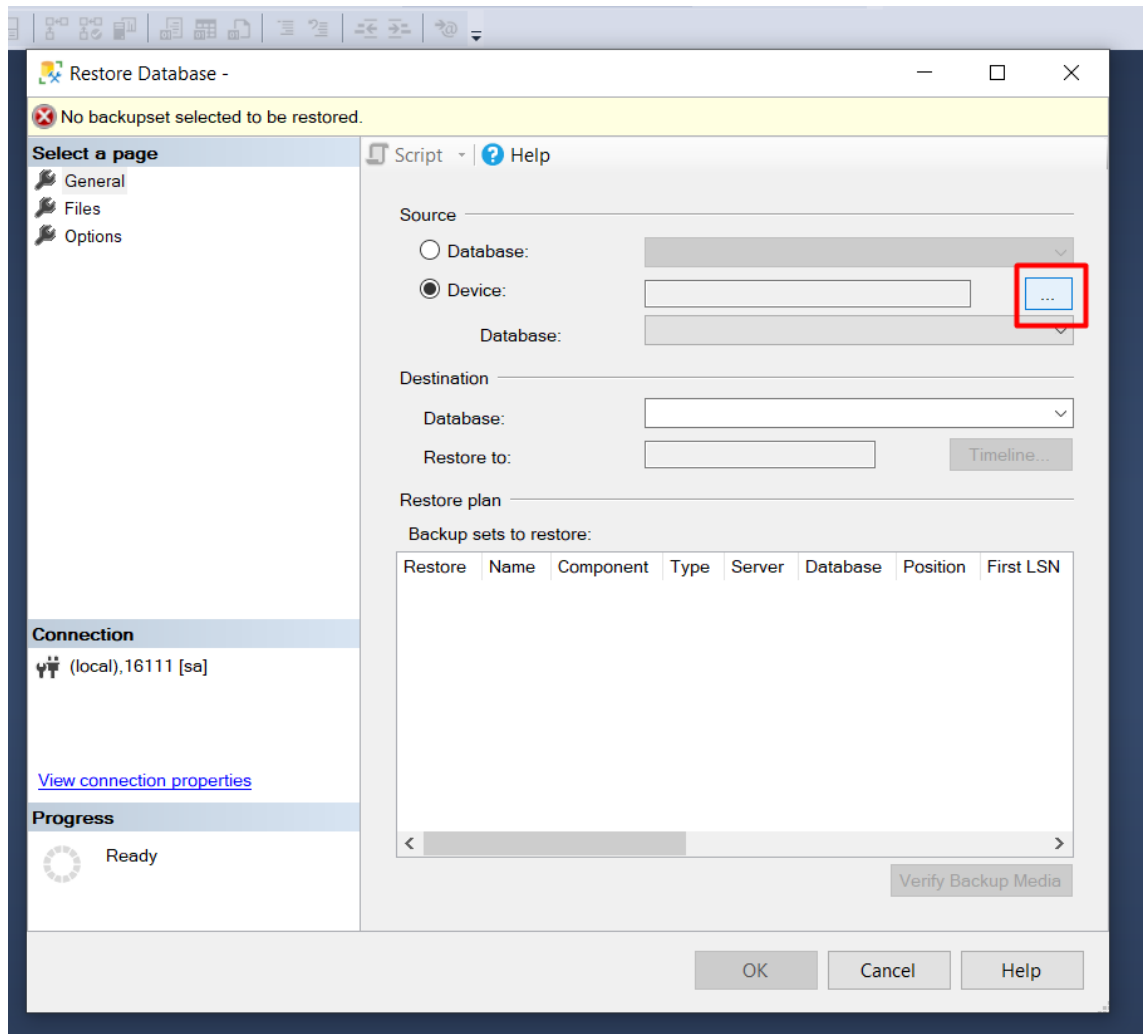
2. Nos conectamos con usuario: sa y clave: Tacna.2020

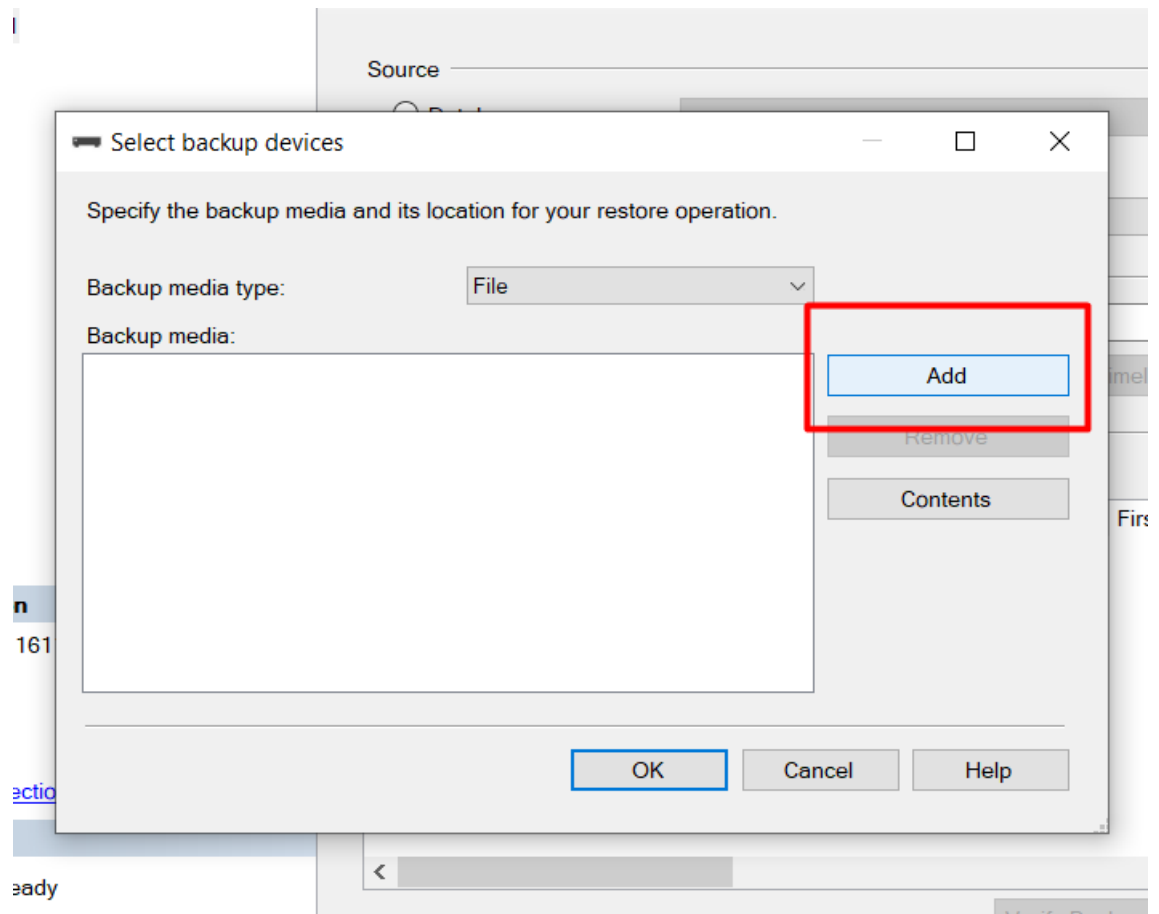


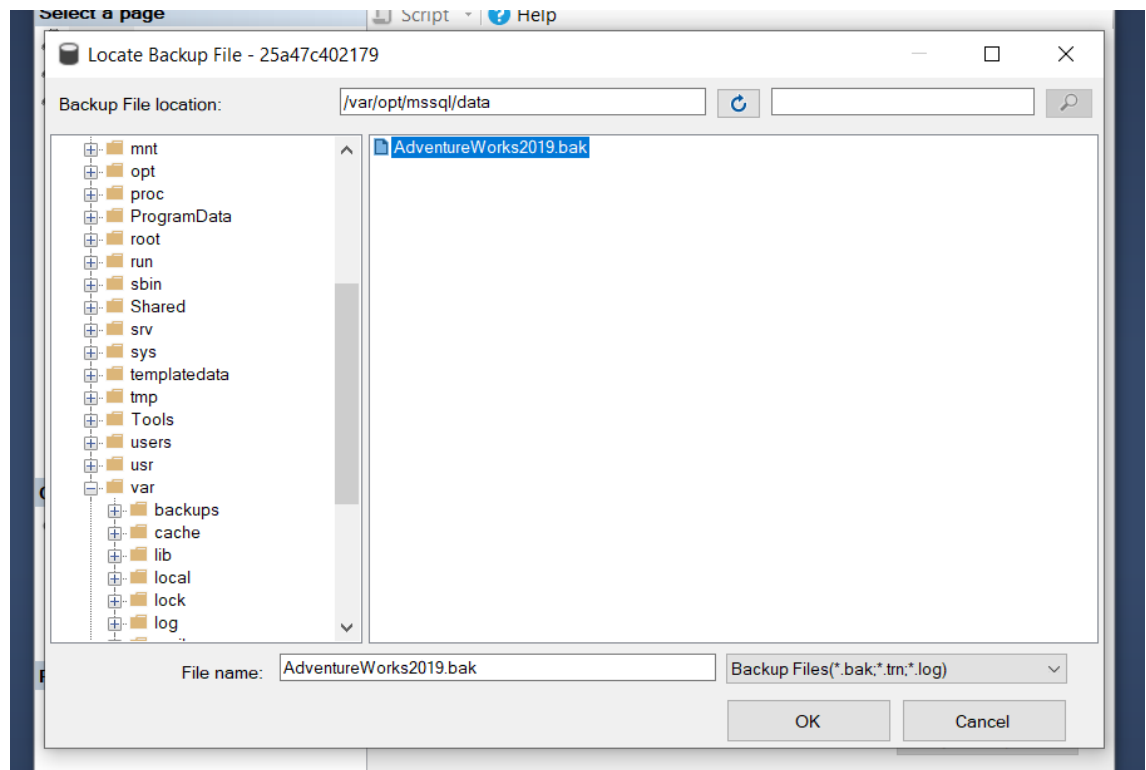
3. Restauramos la base de datos

```
Digest: sha256:bf3cc5fb2abfd327c6eeaf2a021869077298511e
Status: Downloaded newer image for mcr.microsoft.com/mssql/server:latest
25a47c402179a54307ad49572228+a81a4d3f48d1b56ae05565/b8/a69e436a8
PS C:\Windows\system32: docker cp D:\BaseDatosII\AdventureWorks2019.bak SQLLN01:/var/opt/mssql/data/
PS C:\Windows\system32:
```

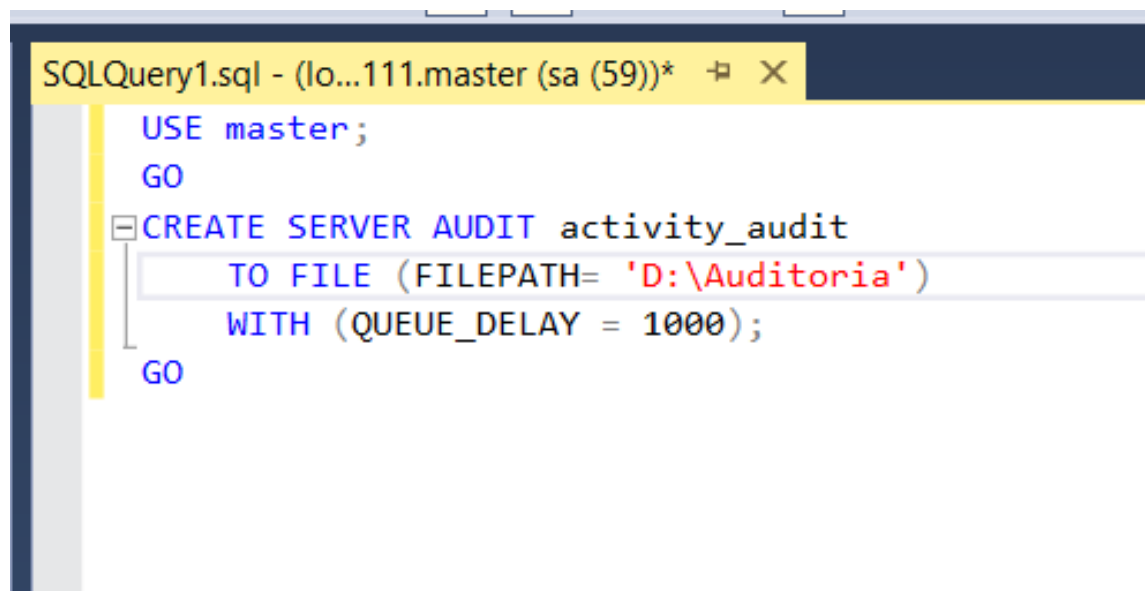








4. Crear una auditoría del servidor con las siguientes propiedades.



5. Activar la auditoría del servidor creada.

```
SQLQuery1.sql - (lo...111.master (sa (59))*)
ALTER SERVER AUDIT activity_audit WITH (STATE = ON);
GO
```

6. Crear una especificación de auditoría del servidor con las siguientes propiedades.

```
SQLQuery1.sql - (lo...111.master (sa (59))*)
CREATE SERVER AUDIT SPECIFICATION audit_logins
FOR SERVER AUDIT activity_audit
ADD (FAILED_LOGIN_GROUP),
ADD (SUCSESFUL_LOGIN_GROUP)
WITH (STATE = ON);
GO
```


7. Activar la especificación de auditoría del servidor creada.

```
SQLQuery1.sql - (lo...111.master (sa (59))) *  [icon] X
USE salesapp1
GO
ALTER DATABASE AUDIT SPECIFICATION salesapp1_audit_spec WITH (STATE = OFF);
GO
ALTER DATABASE AUDIT SPECIFICATION salesapp1_audit_spec
ADD (SCHEMA_OBJECT_PERMISSION_CHANGE_GROUP)
WITH (STATE = ON);
GO
```

8. Crear una especificación de auditoría de base de datos en la base de datos salesapp1 con las siguientes propiedades:

```
SQLQuery1.sql - (lo....salesapp1 (sa (59))) *  [icon] X
USE salesapp1
GO
CREATE DATABASE AUDIT SPECIFICATION employees_change_audit
FOR SERVER AUDIT activity_audit
ADD (INSERT, UPDATE ON DATABASE::salesapp1 BY public),
ADD (SELECT ON SCHEMA:: HR.Employees BY public),
ADD (SCHEMA_OBJECT_CHANGE_GROUP)
WITH (STATE = ON);
GO
```

9. Activar la especificación de auditoría de base de datos creada.

```
SQLQuery1.sql - (lo....salesapp1 (sa (59))) *  X
USE salesapp1
GO
ALTER DATABASE AUDIT SPECIFICATION employees_change_audit WITH (STATE = OFF);
GO
ALTER DATABASE AUDIT SPECIFICATION employees_change_audit
ADD (SCHEMA_OBJECT_PERMISSION_CHANGE_GROUP)
WITH (STATE = ON);
GO
```

10. Ejecutar el siguiente código

```
SQLQuery1.sql - (lo....salesapp1 (sa (59))) *  X
USE salesapp1;

UPDATE HR.Employees SET mgrid = 3 WHERE empid = 9;

INSERT HR.Employees
(lastname, firstname, title, titleofcourtesy, birthdate, hiredate, address, city, region, postalcode, country, phone, mgrid)
SELECT lastname, firstname, title, titleofcourtesy, birthdate, hiredate, address, city, region, postalcode, country, phone, mgrid
FROM HR.Employees WHERE empid = 9;

EXECUTE AS USER = 'marketing_user'
UPDATE HR.Employees SET mgrid = 5 WHERE empid = 9;
REVERT
GO
```

11. Escribir una consulta utilizando la función de sistema `sys.fn_get_audit_file` para devolver todos los datos.

```
SQLQuery1.sql - (lo....salesapp1 (sa (59))) *  X
SELECT * FROM sys.fn_get_audit_file ('D:\Auditoria*', default, default)
```

12. Deshabilitar la auditoría de servidor `activity_audit`.

```
SQLQuery1.sql - (lo....salesapp1 (sa (59))) *  X
USE master;
GO
ALTER SERVER AUDIT activity_audit WITH (STATE = OFF);
DROP SERVER AUDIT activity_audit;
GO
```