

FIT1004 - Revision Notes

CREATE TABLE **nameOfTable**(**columnname datatype**(), **columnName2 datatype**()) ;

```
CREATE TABLE student (  
  studid    number (10) NOT NULL,  
  studfname varchar(20) NOT NULL,  
  studlname varchar(20) NOT NULL,  
  studdob   date NOT NULL,  
  studaddress varchar(100) NOT NULL,  
  studphone number(15) NOT NULL,  
  studemail varchar(50) NOT NULL,  
  
  constraint student_pk primary key (studid)  
);
```

```
CREATE TABLE TableName  
(  
  column1 datatype ( )  
  column2 datatype ( )  
  column3 datatype ( )  
);
```

SELECT

- retrieve data from a table

```
SELECT *  
FROM student ;
```

```
SELECT col1, col2, col3  
FROM table ;
```

INSERT

- insert row of data into table

```
INSERT INTO test VALUES  
( 'LindsaySmith', 'Caulfield' );  
INSERT INTO test VALUES ( 'Harry Potter',  
'Melbourne' );
```

```
INSERT INTO table VALUES ( 'DataofColumn1',  
'DataofColumn2' );  
COMMIT ;
```

COMMIT; = used to instruct the database to make the insertion permanent

Table Commands

CREATE SCHEMA AUTHORIZATION

creates a database schema

NOT NULL

Constraint that ensures that a column will not have null values

UNIQUE

Constraint that ensure that a column will not have duplicate values

PRIMARY KEY

Defines a primary key for a table

```
CREATE TABLE table (  
  col1 datatype ()  
  col2 datatype ()  
  col2 datatype ()  
  
  constraint table_pk primary key  
  (col1)  
);
```

```
CREATE TABLE student (  
  studid   number (10) NOT NULL,  
  studfname varchar(20) NOT NULL,  
  studlname varchar(20) NOT NULL,  
  studdob   date NOT NULL,  
  studaddress varchar(100) NOT NULL,  
  studphone  number(15) NOT NULL,  
  studemail  varchar(50) NOT NULL,  
  
  constraint student_pk primary key (studid)  
);
```

FOREIGN KEY

Defines a foreign key for a table

```
CREATE TABLE enrolment (  
  unitcode char(10) NOT NULL,  
  semester number(1) NOT NULL,  
  ofyear   date NOT NULL,  
  studid   number (10) NOT NULL,  
  mark     number(3) ,  
  grade    char(2) ,  
  
  constraint enrol_pk primary key (semester, ofyear, studid, unitcode),  
  constraint enrol_stud_fk foreign key (studid) references  
  student(studid),  
  constraint enrol_off_fk foreign key (unitcode, semester, ofyear)  
  references offering(unitcode, semester, ofyear),  
  constraint enrol_mark_chk check (mark BETWEEN 0 and 100),  
  constraint enrol_grade_chk check (grade IN ('N', 'P', 'C', 'D', 'HD'))  
);
```

```
CREATE TABLE table (  
  col1 datatype ()  
  col2 datatype ()  
  col2 datatype ()  
  
  constraint table_fk foreign key (col1)  
  references table2 (col1)  
);
```

DEFAULT

Defines a default value for a column when no value is given

CHECK

Constraint used to validate data in a column

```
constraint enrol_mark_chk check (mark between 0 and 100)
```

```
constraint table_column_chk check (column condition)
```

CREATE INDEX

Creates an index for a table

CREATE VIEW

Creates a dynamic subset of rows/columns from one or more tables

ALTER TABLE

Modifies a table's definition (adds, modifies, or deletes attributes or constraints)

```
ALTER TABLE table  
ADD column_name
```

```
ALTER TABLE Persons  
ADD DateOfBirth date ;
```

CREATE TABLE AS

Creates a new table based on a query in the users database schema

DROP TABLE

```
DROP TABLE tableName  
PURGE;
```

```
DROP TABLE test PURGE;
```