

The background features a dark blue gradient with faint, light blue concentric circles and degree markings (40, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260) on the left side, suggesting a technical or scientific theme.

DATABASE SYSTEM LABS – PYTHON & BASIC SQL II

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OBJECTIVES

- Python
 - Basic programming
- DDL
 - Create table, Alter table, Drop table
- DML
 - Insert, Retrieve ,Update, Delete

BASIC PROGRAMMING OF PYTHON

- `counter = 100`
- `miles = 1000.0`
- `name = "hello"`
- `a = b = c = 1`
- `a, b, c, d = 1, 2, "a string", 'another string'`

BASIC PROGRAMMING OF PYTHON

- if condition_1:
 - statement_block_1
 - elif condition_2:
 - statement_block_2
 - else:
 - statement_block_3
- if a < 10:
 - print(a)
 - elif a < 20:
 - a += 3
 - else:
 - print(a**2)

BASIC PROGRAMMING OF PYTHON

- while <expr>:
 - <statement(s)>
- while a < 100:
 - a += 1
 - print(a)
 - # next line...

BASIC PROGRAMMING OF PYTHON

- for <variable> in <sequence>:
 - <statements>
- for i in range(200):
 - print(i)
 - # next line...

BASIC PROGRAMMING OF PYTHON

```
import pymysql
conn=pymysql.connect(host='localhost',user='xxx',password='xxx',database='db2019',charset='utf8')
cursor=conn.cursor()
sql = 'select name,salary from teacher;'
cursor.execute(sql)
retdat = cursor.fetchall()
For row in retdat:
    print(row[0], ': ', row[1])
cursor.close()
conn.close()
```

DDL

- Write a SQL script and execute it repeatedly
 - Create a table: department01
 - Deptname (primary key), Location
 - Create a table: student01
 - ID(primary key), Name, Birthplace
 - Add a new attribute for student01: Deptname
 - Specify the new attribute to reference to department01 table
 - Add five students into student01, and these students belong to different department
 - Drop department01 table

DML

- Import all students from student table into student01 table
- Retrieve name and deptname from student01 table
- Modify Birthplace value of student01 to 'Unknown', and Retrieve again
- Delete all students of "Comp. Sci." department, and Retrieve again



THANKS !

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