

The background is a dark blue gradient with a pattern of concentric circles and degree markings, resembling a compass or a technical drawing. The markings include numbers like 40, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, and 260, along with various curved lines and arrows.

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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