

CCT TEST ITEM	
CLASS	XII
SUBJECT	COMPUTER SCIENCE
Name of the Teacher	SOUMYAMOL D
Name of the Topic/Chapter	Interface of python with an SQL database
<p>A company's database stores employee details such as employeeid, name, department, and salary in a table named employees. Based on the above information, answer the following questions:</p>	
Q.1.	<p>The HR manager wants to increase the salary of all employees in the "Sales" department by 10% using a Python program that interacts with the SQL database. Which of the following Python-MySQL code snippets will correctly update the salaries of all employees in the "Sales" department?</p> <ol style="list-style-type: none"> <code>cursor.execute("UPDATE employees SET salary = salary * 1.10 WHERE department = 'Sales'") conn.commit()</code> <code>cursor.execute("SELECT salary * 1.10 FROM employees WHERE department = 'Sales'") conn.commit()</code> <code>cursor.execute("ALTER TABLE employees SET salary = salary * 1.10 WHERE department = 'Sales'") conn.commit()</code> <code>cursor.execute("DELETE salary FROM employees WHERE department = 'Sales'") conn.commit()</code>
Answer	<ol style="list-style-type: none"> <code>cursor.execute("UPDATE employees SET salary = salary * 1.10 WHERE department = 'Sales'") conn.commit()</code>
Q.2.	<p>The HR manager wants to retrieve the names and employee ids of all employees who earns a salary more than 90000 using a Python program. Which of the following SQL queries embedded in Python will correctly retrieve the required information?</p> <ol style="list-style-type: none"> <code>cursor.execute("SELECT * FROM employees WHERE salary > 90000")</code> <code>cursor.execute("SELECT employeeid, name FROM employees WHERE salary > 90000")</code> <code>cursor.execute("SELECT employeeid AND name FROM employees WHERE salary > 90000")</code> <code>cursor.execute("SELECT employeeid WITH name FROM employees WHERE salary > 90000")</code>
Answer	<ol style="list-style-type: none"> <code>cursor.execute("SELECT employeeid, name FROM employees WHERE salary > 90000")</code>
Q.3.	The HR Manager wants to delete the records of employees who are working in "Finance" department

	<p>Which of the following Python code snippets correctly deletes these records from the database?</p> <ol style="list-style-type: none"> <code>cursor.execute("DELETE FROM employees WHERE department= 'Finance' ") conn.commit()</code> <code>cursor.execute("DELETE * FROM employees WHERE department= 'Finance' ") conn.commit()</code> <code>cursor.execute("DELETE * FROM employees WHERE department= 'Finance' ")</code> <code>cursor.execute("DELETE FROM employees WHERE department is 'Finance' ") conn.commit()</code>
Answer	<ol style="list-style-type: none"> <code>cursor.execute("DELETE FROM employees WHERE department= 'Finance' ") conn.commit()</code>
Q.4.	<p>The HR manager wants to retrieve the employee names starting with the alphabet 'A'.</p> <ol style="list-style-type: none"> <code>cursor.execute("SELECT * FROM employees WHERE name like 'A%'")</code> <code>cursor.execute("SELECT name FROM employees WHERE name like 'A_'"")</code> <code>cursor.execute("SELECT * FROM employees WHERE name is 'A%'"")</code> <code>cursor.execute("SELECT name FROM employees WHERE name like 'A%'"")</code>
Answer	<ol style="list-style-type: none"> <code>cursor.execute("SELECT name FROM employees WHERE name like 'A%'"")</code>