

MINISTRY OF EDUCATION, SINGAPORE
in collaboration with
CAMBRIDGE ASSESSMENT INTERNATIONAL EDUCATION
General Certificate of Education Advanced Level
Higher 2



COMPUTING

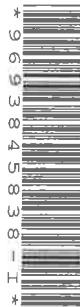
Paper 2 (Lab-based)

INSERT

9569/02

October/November 2024

3 hours



This document consists of 7 printed pages and 1 blank page.



Singapore Examinations and Assessment Board

Cambridge Assessment
International Education

10 Iteration

while loop	for loop
while condition(s): <statement(s)>	for i in range(n): <statement(s)> for record in records: <statement(s)>

11 Selection

Type 1	Type 2	Type 3
if condition(s): <statement(s)>	if condition(s): <statement(s)> else: <statement(s)>	if condition(s): <statement(s)> elif condition(s): <statement(s)> else: <statement(s)>

12 Functions

Function definitions
@<optional decorator(s)>
def <function name> (<parameters>):
 <function body>

Function calls
<function name>(<value>, <name>=<value>)

13 Object-Oriented Programming

class <class name> (<optional parent class>):

def __init__ (**self**, <parameters>):
 <constructor body>

def <method name> (**self**, <parameters>):
 <method body>



2 SQL Statements

<pre>CREATE TABLE table_name(column1_name COLUMN1_TYPE COLUMN1_CONSTRAINTS, column2_name COLUMN2_TYPE COLUMN2_CONSTRAINTS, ... PRIMARY KEY (column1_name, column2_name, ...), FOREIGN KEY (column_name) REFERENCES table_name(column_name));</pre>	
<pre>SELECT column1_name, column2_name, ... FROM table_name WHERE where_expression ORDER BY order_expression ASC;</pre>	<pre>SELECT column1_name, column2_name, ... FROM table_name WHERE where_expression ORDER BY order_expression DESC;</pre>
<pre>SELECT table1_name.column1_name, table2_name.column2_name, ... FROM table_name, table2_name WHERE where_expression;</pre>	
<pre>SELECT table1_name.column1_name, table2_name.column2_name, ... FROM table1_name INNER JOIN table2_name ON join_expression;</pre>	
<pre>SELECT table1_name.column1_name, table2_name.column2_name, ... FROM table1_name LEFT OUTER JOIN table2_name ON join_expression;</pre>	
<pre>SELECT COUNT(*), MAX(column1_name), MIN(column2_name), SUM(column3_name), ... FROM table_name;</pre>	
<pre>INSERT INTO table_name(column1_name, column2_name, ...) VALUES(column1_value, column2_value, ...);</pre>	
<pre>UPDATE table_name SET column1_name = column1_expression, column2_name = column2_expression, ... WHERE where_expression;</pre>	
<pre>DELETE FROM table_name WHERE where_expression;</pre>	
<pre>DROP TABLE table_name;</pre>	

3 SQLite Types, Constraints, Functions and Operators

Types	Constraints	Functions	Operators			
NULL	NOT NULL	COUNT()		/	<	AND
REAL	PRIMARY KEY	MAX()	+	%	<=	OR
INTEGER	AUTOINCREMENT	MIN()	-	=	>	IS
TEXT	UNIQUE	SUM()	*	!=	>=	IS NOT



7 CSS Properties

Common	Box Model	Typography
display background color	height width border border-bottom border-left border-right border-top margin margin-bottom	margin-left margin-right margin-top padding padding-bottom padding-left padding-right padding-top

