Lesson Plan

Cambridge IGCSE Computer Science (0478) - Year 8

WEEK #12 - LP #1 - CAMBRIDGE IGCSE COMPUTER SCIENCE (0478) - Y 8 - 60 - *LP Approved*

Aims

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Just Information	Information
Understand and use the concept of If conditional statement in Python Programming	

Learning Objectives

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Just Information	Information
By the end of the lesson students would be able to develop and evaluate python program using IF statement after having practised various code fragments and research .	

Key Vocabulary

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Just Information	Information
if, if else, if elif	

Introduction / Lead in

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Discussion between Learners and Teacher	Teachers Talking Time
The teacher will ask the following questions to the students to elicit their prior knowledge. 1. what is Relational operator? 2. what is logical operator and when should we use it? Teacher states the objective of the lesson after the discussion of the above questions with the students	

Development

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Discussion between Learners and Teacher	Teachers Talking Time

Teacher will review previously covered lessons and introduce new topic. Code fragments will be displayed on the screen, and students will actively participate in identifying errors or bugs within the code. This interactive approach fosters student-teacher engagement, promoting the development of their programming skills through real-time problem-solving discussions.

Incorrect Code

```
number = 0

if number > 0:
print("Positive number")

elseif number == 0:
    print('Zero')
else:
    print('Negative number')
```

Correct Code

```
number = 0

if number > 0:
    print("Positive number")

elif number == 0:
    print('Zero')
else:
    print('Negative number')
```

for i **in range**(1, 11, 1): # 2 *i (current number) product = n * i **print**(product)

Learners watch the following video for further information about for loop in python

IF else statement: https://www.youtube.com/watch?v=qf0sfRZ0hHc

Sr#	Resource Name	Resource Type	Details	Qty
1	Games/Video	URL	https://www.youtube.com/watch?v=qf0sfRZ0hHc	0

Practice work

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Individual Learner | Learners Individual Work

An assessment of research and information identification skills will be conducted, focusing on specific topics. Students will assess and enhance their program codes through practical exercises. The following coding challenges will be undertaken.

- Write a program to take values of length and breadth of a rectangle from user and check if it is square or not.
- ```
  print "Enter length"
  length = input()
  print "Enter breadth"
  breadth = input()
  if length == breadth:
    print "Yes, it is square"
  else:
    print "No, it is only Rectangle"
  ```
- A shop will give discount of 10% if the cost of purchased quantity is more than 1000.

Ask user for quantity. Suppose, one unit will cost 100. Judge and print total cost for user

```
print "Enter quantity"
quantity = input()
if quantity*100 > 1000:
  print "Cost is",((quantity*100)-(.1*quantity*100))
else:
  print "Cost is",quantity*100
```

- A student will not be allowed to sit in exam if his/her attendence is less than 75%. Take following input from user.
  - Number of classes held.
  - Number of classes attended.
  - And print percentage of class attended. Is student is allowed to sit in exam or not.
  - ```
    print "Number of classes held"
    noh = input()
    print "Number of classes attended"
    noa = input()
    atten = (noa/float(noh))*100
    print "Attendence is",atten
    if atten >= 75:
      print "You are allowed to sit in exam"
    else:
      print "Sorry, you are not allowed. Attend more classes from next time."
    ```

Differentiated Instruction - Gifted and Talented

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Teacher to the leaners	Teachers Talking Time
MA & HA- will be able to write the python code by themselves and do the peer checking LA- will get the help from the teacher whenever required. **Discussion** **Video**	

Plenary

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Discussion among Learners	Team Work
Give me Five Students will be writing the five challenges they faced while writing the programs and teacher will reflect on the same .	