



INDIAN SCHOOL AL WADI AL KABIR

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| Class: VIII | Department: Computer Science | Year: 2025-2026 |
| Worksheet with solutions | Subject: Computer Science Topic: Control Structures | |

I. Choose the correct option

- Which of these is not a valid Python loop?
i) for loop ii) **if loop** iii) while loop iv) None of these
- What does an 'if' statement do?
i) Closes the program ii) **Make a decision** iii) Ask for input iv) Iterates an input
- What is the correct output for
for i in range (1,10):
print(i)
i) 0,1,2,3,4,5,6,7,8,9 ii) 1,2,3,4,5,6,7,8,9,10 iii) 0,1,2,3,4,5,6,7,8,9,10 iv) **1,2,3,4,5,6,7,8,9**
- This statement allows the user to check for multiple expression
i) for ii) else iii) **elif** iv) while

II. Fill in the blanks

- Looping statement allows us to execute a set of code repeatedly.
- In if-else statement in Python, there can have one else block.
- In Python, non-zero values are interpreted as true
- Elif is used as short for 'else if'.
- The 'For' loop in python is used to iterate over a sequence or other iterable objects.
- The while loop in python is used to iterate over a block of code as long as the test expression is true.
- Conditional statements helps to implement decision -making in a program.

III. Match the Following

Column A

- if
- if-else
- for loop
- range()
- while loop
- infinite loop

Column B

- Repeats a block of code as long as a condition is True
- Executes a block of code only if a condition is True
- Iterates over a sequence (like a list, string, or range)
- Generates a sequence of numbers, often used with a for loop
- Executes one block if a condition is True, another if False
- A loop that runs forever unless stopped manually

Answer

| Column A | Column B |
|------------------|----------|
| 1. if | B |
| 2. if-else | E |
| 3. for loop | C |
| 4. range() | D |
| 5. while loop | A |
| 6. infinite loop | F |

IV Write true or false

1. The if statement executes a block of code only if the condition is True.
Answer: True
2. The if-else statement allows executing one block if a condition is True and another block if False.
Answer: True
3. A for loop can only iterate over numbers.
Answer: False
4. The range() function generates a sequence of numbers, which can be used in a for loop.
Answer: True
5. A while loop executes a block of code at least once, even if the condition is False.
Answer: False
6. if-elif-else can have multiple elif conditions.
Answer: True

V)Application based questions

1. Bheem is writing code ,he wants to put one condition in the code, which statement will you suggest him?
Ans:if statement
2. Avneet wants to print numbers between 20 to 50 by using Python code.Which statement will you suggest him?
Ans:for statement

VI)Find the output of the following

a) for i in range(5):
 print(i)

Ans: 0
1
2
3
4

b) for i in range(1, 10, 2):
 print(i)

Ans: 1
3
5
7
9

c) for i in range(10, 0, -2):
 print(i)

Ans: 10
8
6
4
2