

Textbook Exercise of L-8 Scratch-3 Programming

A. Tick the correct answer.

- 1) **Boolean** represents data that has an assigned value of either True or False.
- 2) **Integer** is the numeric value that does not include a decimal value.
- 3) A **sequential** statement shows one or more actions following each other.
- 4) The **Nested Repeat** block is formed when we insert a Repeat block inside another Repeat block.
- 5) Broadcast is received by **when I receive()** block.

B. State true or false.

- 1) In scratch, variable can only store multiple values. **False**
- 2) Operator blocks are red in colour. **False**
- 3) The If-then-else block is a control block which checks its condition. **True**
- 4) By default, the white box in the Repeat block contains the numeric value. **True**
- 5) Broadcast is a message that is sent to notify that an event has happened. **True**

C. Fill in the blanks.

- 1) A **program** is a set of instructions which are executed in sequential manner.
- 2) **Sensing** menu provides many blocks which are used to get information from the user.
- 3) A program is a set of instructions which are executed in **sequential** manner.
- 4) The **If-then** block is a control block which is used to check its condition.
- 5) **Broadcast** is a good way to have sprites and scripts communicates.

D. Differentiate between the following:

1	If-then block	If-then-else block
	It is a control block which is used to check its condition. If the condition is true, the code inside the C block will run. If the condition is false, the code inside the C block will be ignored.	It is also a control block which is used to check its condition. If the condition is true, the code inside the first C block will run. If the condition is false, the code inside second C block will be activated.
2	Repeat block	Nested repeat block
	A control block used to run the script for given number of times.	Repeat block inside another Repeat block, it is called nested repeat.

E. Answer the following questions:

Q:1	What are variables?
A:1	Variables are the names we give to computer memory locations which are used to store value (data/information) in a computer program.
Q:2	What is a conditional statement?
A:2	A conditional statement tells the program which action to take, based on a certain condition.
Q:3	What is Event?
A:3	Event is an action or occurrence detected by a program.
Q:4	What is event-driven programming?
A:4	It is a programming paradigm in which the flow of program execution is determined by events.
Q:5	What is nested repeat?
A:5	Repeat block inside another Repeat block, it is called nested repeat.
Q:6	What is the use of broadcast in Scratch?
A:6	Broadcast is a message that is sent to notify the scripts that, an event has happened.

F. Application-based questions:

Q	Sonika's computer teacher ask which block in Scratch is used to add two numbers. Tell her the name this block.
A	Operator block