Course code : CSE552

Course Title : Robotic Process Automation Design and Development.

Term : Sep 2020 – Jan 2021

Date : 19/10/20

No of Pages : 5

Q-1)

a) Robotic Process Automation is software that can be programmed easily to do small, repetitive tasks accross various applications.

Benefits:

→ Time saving: Once the bot is programmed it can be run any number of times as long as the backround program's interface remains same.

→ Cost Saving: Bots can Significantly reduce costs that occur to do small, repetitive tasks.

→ Less chances of error: Bots are less prone to errors than humans, which improves efficiency and reduces error.

→ High flexibility to control the working of the bot.

→ Minimal coding experience required to develop bots.

b) Types of Robots:

→ Attended Robots

→ Unattended Robots.

Attended Robots: They operate with periodic human intervention

They are triggered by user events.

Unattended Robots: They operate without any human interventio

They are controlled by UI Path Orchestrator in UI Path.

Challenges in RPA:

→ Integration with Base Process: The Bot is designed for a particular User Interface, if the interface of base process changes, bot should be modified.

→ Identifying the right process for automation: The developer must identify the right process for automation and select them.

→ Process Analysis Issues: Problems may occur during analysis of process for automation.

c)

Algorithm:

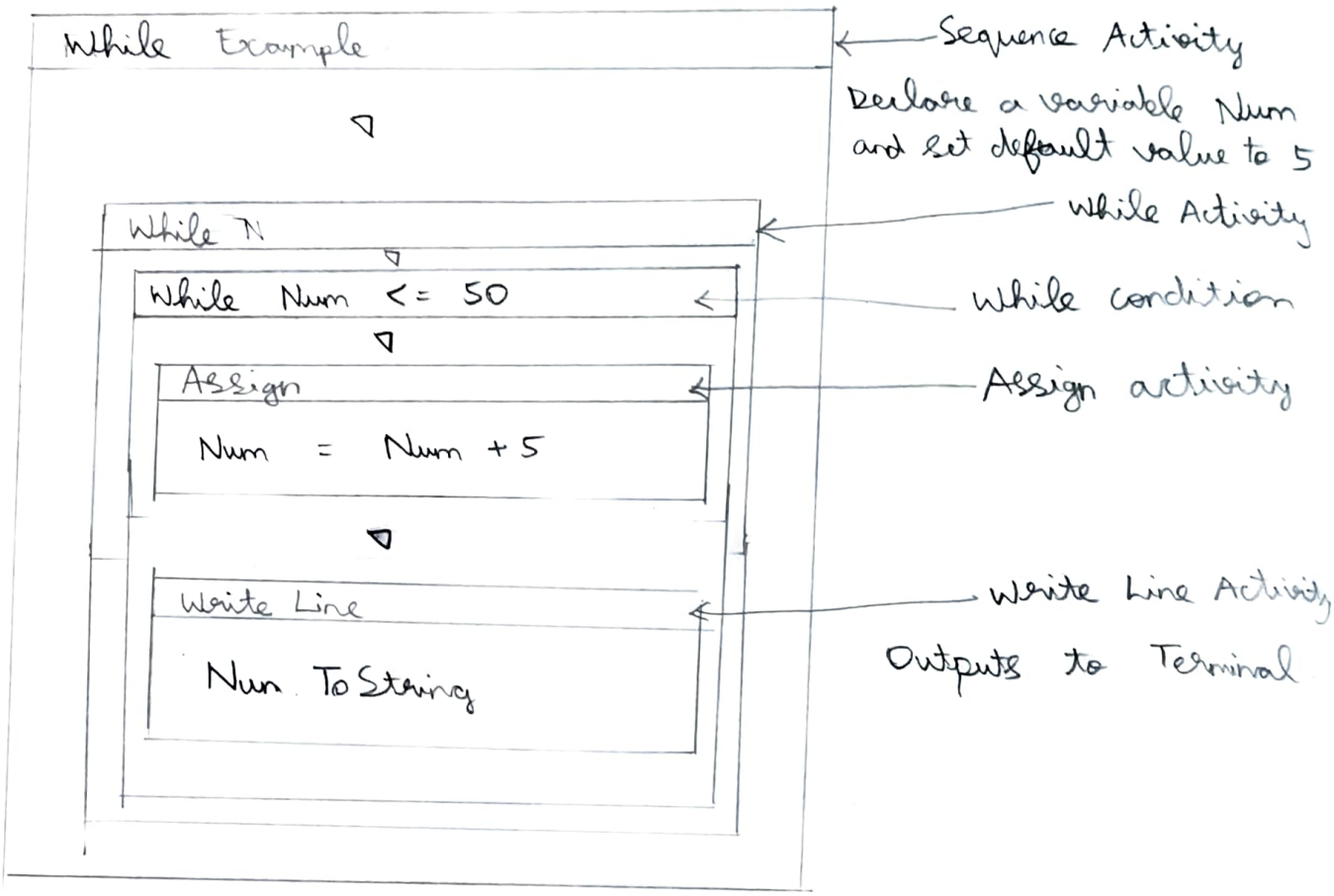
Step-1: Start

Step-2: Declare integer variable 'Num' and set default value to 5

Step-3: While 'Num' <= 50

Step-4: Num = Num + 5

Step-5: Stop.



Q-2)

c) Algorithm :

Step-1 : Start

Step-2 : Declare integer array 'A' and initialize values {3, 5, 7, 9, 89}

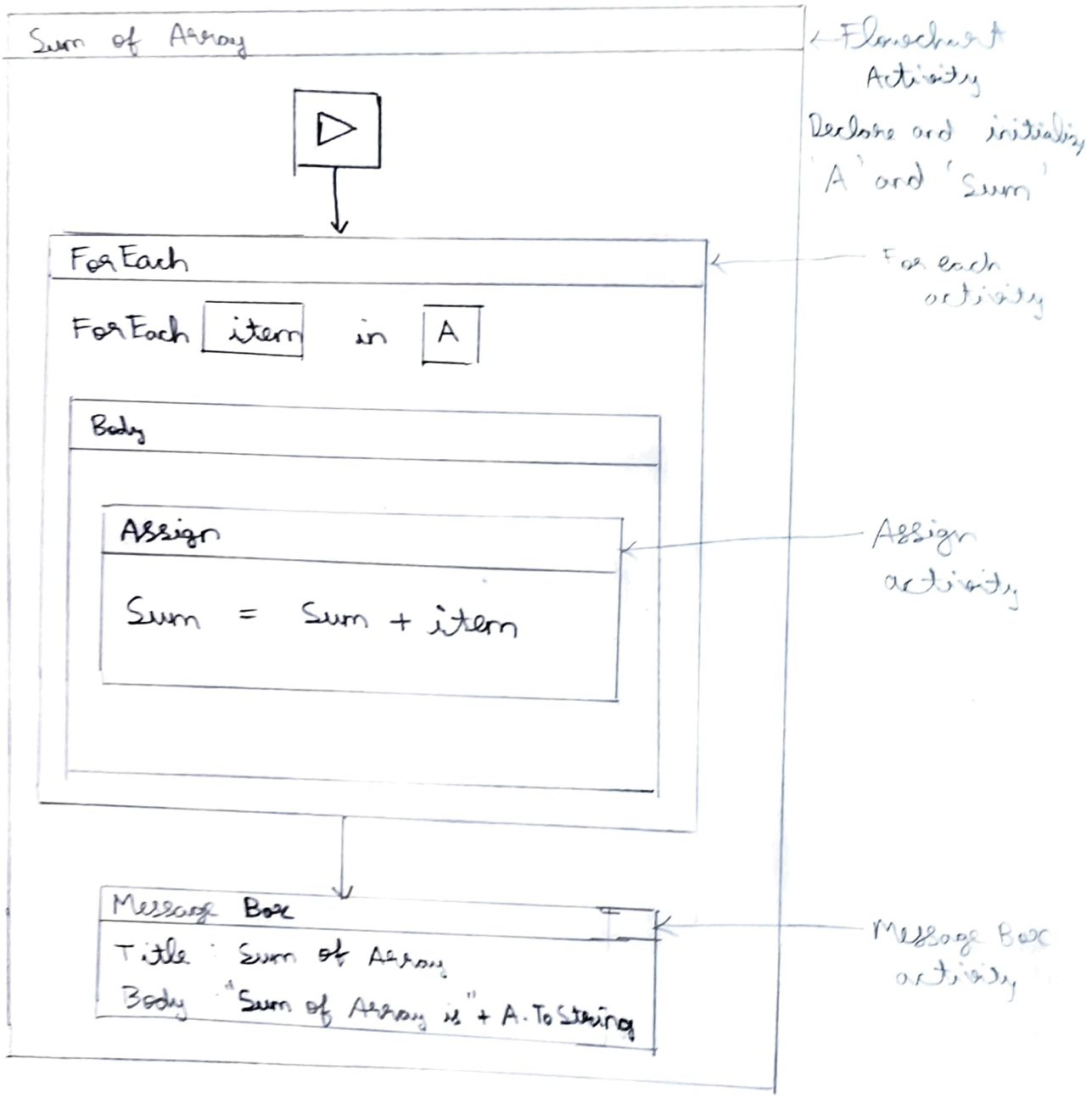
Step-3 : ~~For Each item in A~~
Declare integer variable 'Sum' and set default to 0

Step-4 : For Each item in A

Step-5 : Sum = Sum + item

Step-6 : Display Sum

Step-7 : Stop



b) Types of Variables:

→ Int32 : Integer values like 1, 2 etc. Default value is 0

→ String : String values like "Hello", "Hi" etc. Must be inside " ". Default value = ""

→ Bool : Holds True or False

→ Array : Collection of homogeneous elements of same datatype
& String array = {"Hello", "Hi"}

→ DateTime Holds System Date and Time.

→ DataTable : Stores data in rows and columns.

Variables	Arguments
→ Used to store data in same workflow	Used to pass data to other workflows
→ Types : Integer, Array, String etc.	Types : In, Out, In/Out.

a) Types of Projects :

→ Sequence :

A Sequence is a collection of steps to be performed one after the other. Each step performs some activity.

→ Flowchart :

It is generally used for larger applications. Consists of several sequences. Easier for decision making applications.

→ State Machine :

It consists of several states over which activites are performed. These have several sequences as well.

END