Robot Programming Lab #5 Create a program with gripper JD Jones and John Nelson

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Point Value = 50 points

In this lab you will modifying your lab 4 program. In this lab you will create 5 positions and open and close the gripper.

**Ensure your ACTIVE Tool and User frames are what you programmed in labs 2 and 3.** If you don’t this will cause problems later. Hint: (little yellow window).

You will need to open your old program. Copy the old program and make the program name your First name up to 6 characters and the lab number. For example, JD05.

Do this by pressing the SELECT button and put the cursor on the name and press enter.

You will have your lab 4 program.

The F keys should say F1 Point F5 Touchup

On the right hand side of F5 key it will show a greater than > symbol. This means there are more F keys available on another page.

Press NEXT

The F keys will change. F1 INST and F5 EDCMD.

INST = instruction not insert!

EDCMD = edit command.

I will need you to insert a line at the top of the program. You will need to open the gripper. I will walk you through how to do this.

Place the cursor at line 1:

Press Next

Press EDCMD

Press Insert

At the bottom of the white screen “how many lines?” Press 1 enter

Now your program should look like this.

1:

2:J P[1] 100% Fine

3:J P[2] 100% Fine

4:J P[3] 100% Fine

5: END

When you insert it always insert above the cursor position.

Now I will show you how to open the gripper.

Press INST

Choose I/O press enter

Choose RO[\_] press enter

Press the number 3 and enter

Choose ON and press enter

Now your program should look like this.

1: RO[3]=ON *There might be a description with the 3 inside the brackets. This is ok.*

2:J P[1] 100% Fine

3:J P[2] 100% Fine

4:J P[3] 100% Fine

4: END

You have just told the robot to open the gripper on the first line.

Move the robot to position 1 and have it stop. You should be able to perform this from the previous lab. Hint: step.

Now add 2 more positions and close the gripper.

The process should be

1) Open gripper

2) Position 1

3) Position 2

4) Close Gripper

5) Position 3

6) Position 4

7) Position 5

8) END

Be ready to demonstrate the following to the instructor.

Points for

A) Gripper commands. 10 pts

B) Programming 2 new positions. 10 pts

C) Following the process. 10 pts

D) Creating a new program. 10 pts

E) Running the robot in auto. 10 pts

INSTRUCTOR’S INITIAL\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_