

C-02 AI solution

Using ChatGPT to Generate Robot Programs with Natural Language

- The work that the operator wants the robot to perform is entered in ChatGPT to generate a robot program. In the near future, beginners with almost no experience in programming may be able to generate advanced programs as long as they know the work to perform.

A robot program can be created by entering instructions as if talking to a person

<Prompt>

"First move to the work origin. The origin is P1."
 "Next, move to the location immediately before the work. The location is P2."
 "Next, move to the work location. The location is P3."
 "At the work location, close the hand to grip the workpiece. Enable IO64 to close the hand."
 "Finally, return to the work location."
 Create a program that meets the above conditions.

```

!TITLE "ロボットプログラム"
Sub Main
  TakeArm Keep = 0
  Move P,@P P[1] ' 作業原点へ移動する
  Move P,@P P[2] ' 作業直前の場所へ移動する
  Move P,@P P[3] ' 作業場所へ移動する
  Set IO[64] ' ハンドを閉じる
  Move P,@P P[3] ' 作業場所へ移動する
End Sub
    
```

Organize the design specifications and generate the program

Because a program can be created in line with a workflow simply by entering a disorderly set of requirements, this dramatically reduces the work required for adding/correcting the program.

<Prompt (editing)>

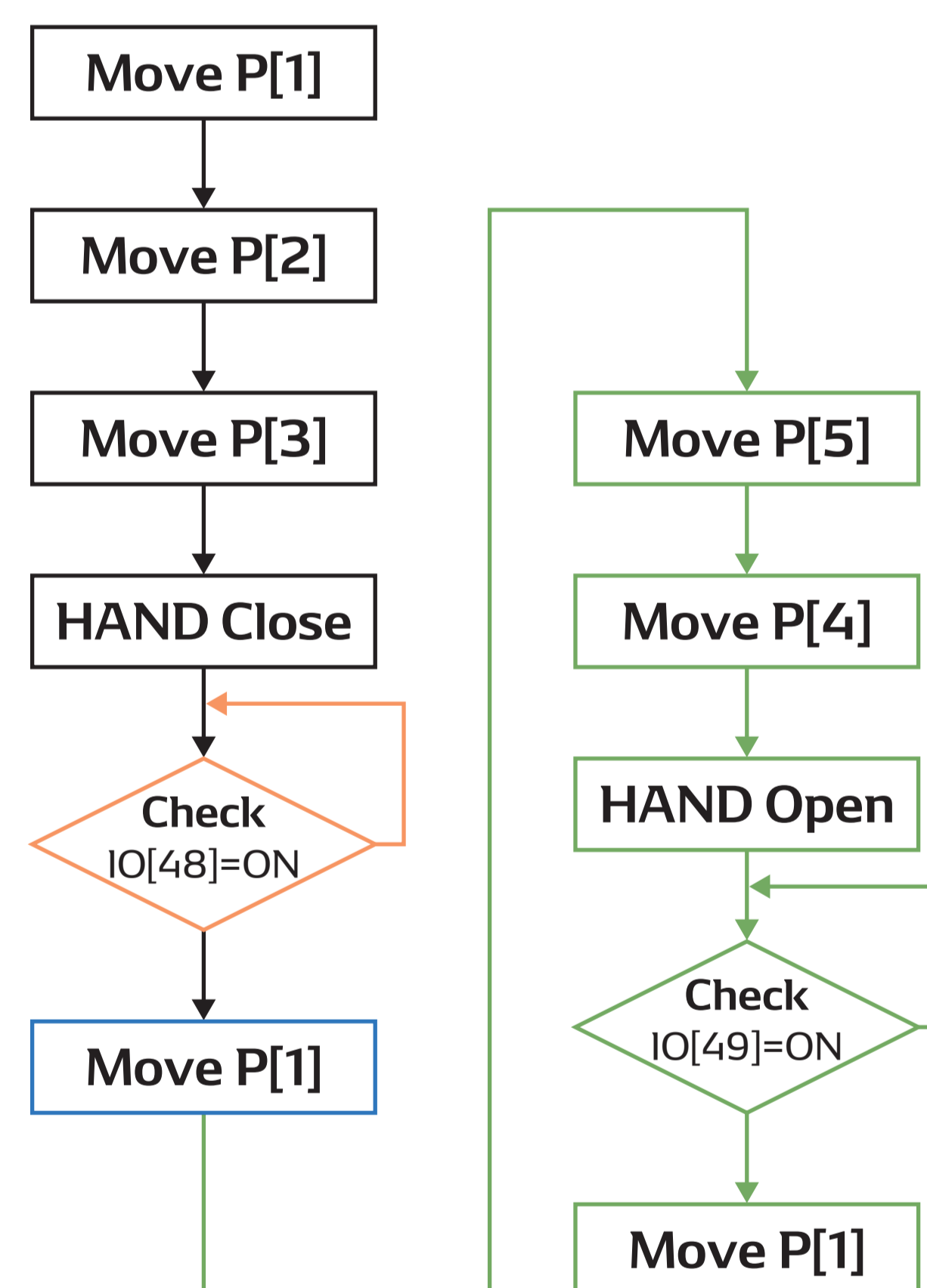
"Correct the final move destination to be the work origin."

<Prompt (setting conditions)>

"When closing the hand, confirm that the hand has been closed. To check whether the hand has closed, wait until IO48 is enabled."

<Prompt (adding work)>

"To open the hand, disable IO64 and enable IO65. To check whether the hand has opened, wait until IO49 is enabled."
 "Add a program that moves in the same way from the work origin to the workpiece storage space, opens the hand, then returns to the work origin.
 The workpiece storage location is P4, and the position immediately before the workpiece storage location is P5."



System configuration

