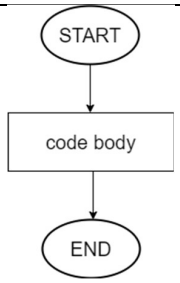
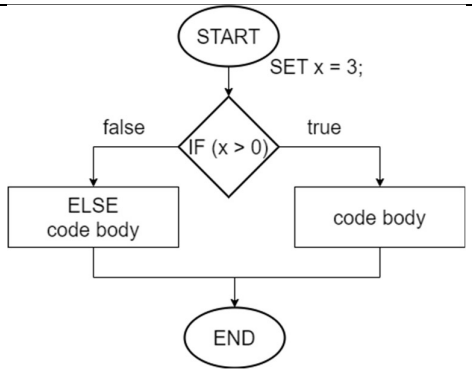
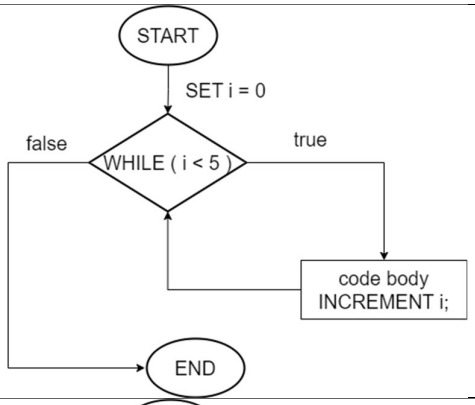
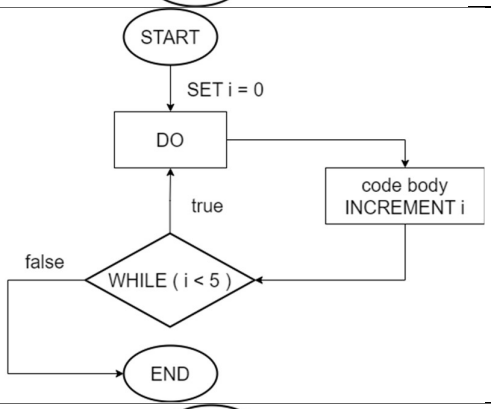
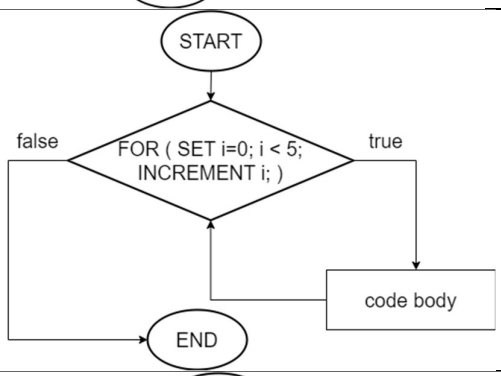
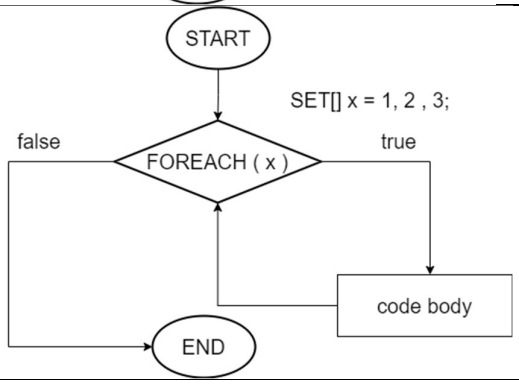
Pseudocode Cheat Sheet

VERB	Definition
START/END	Begin / finish code
SET	Set a variable
INPUT / DISPLAY	Obtain / Provide user data
GET / PUT	Obtain data from a sensor. Or Provide data to an actuator
CALCULATE, COMPARE	Compute
INCREMENT / DECREMENT	Add / Subtract one
CALL	Run function / subroutine

Symbol	Definition	Examples	
=	assign	i = 5	
==	is equal to	x == 5, x == z	IF x == 4
>	is greater than	x > 5	IF x > 4 then
>=	is greater than or equal to	x >= 6	LOOP WHILE x >= 6
<	is less than	value[y] < 7	LOOP UNTIL value[Y] < 7
<=	is less than or equal to	value[] <= 12	IF value[Y] <= 12 THEN
≠	not equal to	x ≠ 4, x≠ x	
AND	logical AND	a AND b	IF x < 7 AND y > 2 THEN
OR	logical OR	a OR b	IF x < 7 OR y > 2 THEN
NOT	logical NOT	NOT a	IF NOT x = 7 THEN
mod	modulo	19 mod 6 = 1	IF value[y] mod 7 = 0 THEN
div	integer part of quotient	24 div 7 = 3	IF value[y] div 7 = 2 THEN

Operation	Flowchart example	Pseudocode example
sequential operations		START perform task1 perform task2 END

conditional operations		START
		SET x = 3
		IF x > 0 THEN
		DISPLAY “X is greater than zero”
		ELSE
		DISPLAY “X is not greater than zero”
		END IF
		END

while-loop		START LOOP WHILE i < 15 DISPLAY “i is less than 15” INCREMENT i END LOOP END
do-while-loop		START LOOP DO DISPLAY “i is less than 15” INCREMENT i WHILE i < 15 END LOOP END
for-loop		START LOOP COUNT from 0 to 5 DISPLAY “Counting 1 to 5” INCREMENT COUNT END LOOP END
foreach-loop		START SET[] x= 1, 2, 3 LOOP EACH x DISPLAY “Counting out x” END LOOP END

Arduino Pseudocode Examples

Simple Blink Pseudocode

```
START
SET LED = 13
WHILE (Power On)
     PUT 13 on
     WAIT 2 seconds
     PUT 12 off
     WAIT 2 seconds
END
```

Simple LED Connected to a digital light sensor

```
START
SET LED = 13
SET LightSenor = 2
WHILE (Power On)
     GET LightSensor
     IF (LightSensor == 1)
          LED on
     Else
          LED off
END
```