

DECISIONS (SELECTION, BRANCHING)

① SWITCH → CHECK SPECIFIC VALUES OR LISTS OF VALUES {1, 2, 3...}
OFTEN USED FOR MENUS
CAN BE FASTER TO TYPE & READ

② IF → CHECK SPECIFIC VALUES AND RANGES OF VALUES
CAN BE USED FOR ANY DECISIONS (THAT COMPUTERS CAN MAKE!)

DETAILS

OPTIONAL
OTHERWISE
ABOVE END
(IF NONE OF ABOVE CASES
ARE TRUE, DO THIS)

DECISION STRUCTURES CAN BE "NESTED"

ex. SWITCH a
CASE 1
IF b < 5
END
CASE 2

ex. IF a < 3
SWITCH b
CASE 1
END
END

ex. IF
IF
END
END

ex. SWITCH var1
CASE 1
SWITCH var2
END
END

if

OPTIONAL 1 OR MORE

elseif ←

OPTIONAL

else

Chap 4
11

$$\frac{V_2}{V_1} = \frac{A_1}{A_2}$$

PSEUDO CODE

% V_2 over $V_1 = A_1$ over A_2

% GET A_1 & A_2

% CALC A_1 over $A_2 \Rightarrow V_2$ over V_1

% DECIDE IF

V_2 over V_1

> 1

= 1

< 1

Chap 4
12

PSEUDO CODE

GET pH VALUE

① DO WITHOUT "NESTING" IF'S

if pH > 14

 disp('invalid')

elseif pH <= 14 && pH > 7

 disp('basic')

else

 disp('invalid')

end

② DO WITH NESTED IF'S

if pH > 14 || pH < 0

 disp('invalid')

else

 % valid pH

 % check basic, neut, acid

end

IF'S

if reg >= 1 && reg <= 5
% in 1st REGION

if AA == 'A' || AA == 'C' ||

PSEUDOCODE (reg) Chap 4 (19)
GET REGION # & AMINO ACID LETTER (AA)

DECIDE IF IN 1st REGION (1-5)

DECIDE IF STRONG OR WEAK BIND

IF IN 2nd REGION

DECIDE STRONG OR WEAK

SWITCH

switch reg

case {1, 2, 3, 4, 5}
do in 1st REGION

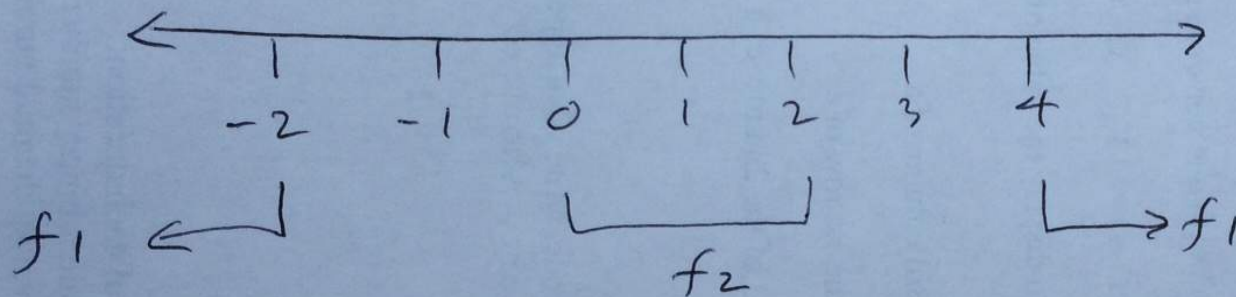
switch AA

case {'A', 'C', 'L', 'Y', 'E'}
% STRONG BIND

Chap 4, prob 26

SHIFT TO NEW DOMAIN - PAPER!

DRAW NUMBER LINE & LABEL REGIONS



- etc for f_3 & f_4

- NOW GO BACK TO COMPUTER DOMAIN
& WRITE AS SWITCH

(HINT: MAY NEED OTHERWISE)

- DO NOT WRITE FUNCTIONS, JUST
USE, e.g., `disp('call f1')`