

```

1: *****
2: *****
3: ./exercise2/example_case.f90
4:
5: PROGRAM example_case
6:
7: IMPLICIT NONE
8:
9: INTEGER :: i
10:
11: PRINT*, "Enter an INTEGER"
12: READ*, i i*** Get the user to input i
13:
14: i**** CASE construct NOTE overlapping of ranges in case-selector is
15: i**** NOT permitted. Therefore ORDERING is NOT important
16:
17: SELECT CASE (i)
18: CASE (2)
19: PRINT*, "Integer = 2"
20: CASE (7)
21: PRINT*, "Integer = 7"
22: CASE (3:6)
23: PRINT*, "Integer is greater than 2 an less than 7"
24: CASE (8:10)
25: PRINT*, "Integer is greater than 7 and less than 11"
26: CASE DEFAULT
27: PRINT*, "No Match"
28: END SELECT
29:
30: END PROGRAM example_case
31: *****
32: *****
33:
34: *****
35: *****
36: ./exercise1/example_if.f90
37:
38: PROGRAM example_if
39: i**
40: i** First piece of code to demonstrate the importance
41: i** of ordering and the allowed overlapping of the test ranges
42: i** in an IF construct.
43:
44: IMPLICIT NONE
45:
46: INTEGER :: i
47:
48: PRINT*, "Enter an INTEGER"
49: READ*, i i*** Get the user to input i
50:
51: i**** IF construct with overlapping of test ranges.
52: i**** Therefore ORDERING is important
53:
54: IF (i .EQ. 2) THEN
55: PRINT*, "Integer = 2"
56: ELSEIF (i .EQ. 7) THEN
57: PRINT*, "Integer = 7"
58: ELSE IF (i .GE. 2 .AND. i .LE. 8) THEN
59: PRINT*, "Integer is greater than one and less than nine"
60: ELSE IF (i .GE. 6 .AND. i .LE. 10) THEN
61: PRINT*, "Integer is larger than five and less than eleven"
62: ELSE
63: PRINT*, "No Match"
64: END IF
65:
66: END PROGRAM example_if
67:

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68: *****
69:
70:
71: *****
72: ./exercise1/example_if2.f90
73:
74: PROGRAM example_if2
75: i**
76: i** 2nd piece of code to demonstrate the importance
77: i** of ordering and the allowed overlapping of the test ranges
78: i** in an IF construct.
79: i**
80:
81: IMPLICIT NONE
82:
83: INTEGER :: i
84:
85: PRINT*, "Enter an INTEGER"
86: READ*, i i*** Get the user to input i
87:
88: i**** IF construct with no overlapping of test ranges.
89: i**** Therefore ORDERING is NOT important
90:
91: IF (i .EQ. 2) THEN
92: PRINT*, "Integer = 2"
93: ELSE IF (i .EQ. 7) THEN
94: PRINT*, "Integer = 7"
95: ELSE IF (i .GT. 2 .AND. i .LT. 7) THEN
96: PRINT*, "Integer is greater than 2 an less than 7"
97: ELSE IF (i .GT. 7 .AND. i .LE. 10) THEN
98: PRINT*, "Integer is greater than 7 and less than 11"
99: ELSE
100: PRINT*, "No Match"
101: END IF
102:
103:
104: END PROGRAM example_if2
105:
106: *****
107:

```