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20P-0153

BSCS-6B

AI Lab-02

Task-01

```
In [1]: def fire_alarming():

    fire_department = "NO CALLING"
    sprinkle_system = "OFF"
    alarm = "OFF"
    print("\n\n\t\tWELL-COME FIRE ALARM SYSTEM \n\n")
    smoke = int(input("Enter status of smoke (0/1): "))
    temperature = int(input("Enter value of temperature : "))
    # temp and smoke both detected
    if temperature >= 50 and smoke == 1:
        alarm = "ON"
        fire_department = "CALLING"
        sprinkle_system = "ON"
        print("HIGH TEMPERATURE AND SMOKE IS DETECTED ")
        print(f"ALAEAM STATUS {alarm} , SPRINKLE SYSTEM STATUS {sprinkle_system} , FIRE-BRIGADE STATUS {fire_department}")
    # smoke is detected
    elif smoke == 1:
        alarm = "ON"
        sprinkle_system = "ON"
        print("SMOKE IS DETECTED BUT NO HIGH TEMPERATURE")
        print(f"ALAEAM STATUS {alarm} . PRINKLE SYSTEM STATUS {sprinkle_system}")

    # temp is detected
    elif temperature > 50:
        alarm = "ON"
        fire_department = "CALLING"
        print("HIGH TEMPERETURE IS DETECTED BUT NO SMOKE")
        print(f"ALAEAM STATUS {alarm} . FIRE-BRIGADE STATUS {fire_department}")

    # temp and smoke both not detected
    # if temperature < 50 and smoke == 0:
    else :
        alarm = "OFF"
        fire_department = "OFF"
        sprinkle_system = "OFF"
        print("BUILDING IS SAFE ")
        print(f"ALAEAM STATUS {alarm} , SPRINKLE SYSTEM STATUS {sprinkle_system} , FIRE-BRIGADE STATUS {fire_department}")

fire_alarming()
```

WELL-COME FIRE ALARM SYSTEM

```
Enter status of smoke (0/1): 1
Enter value of temperature : 56
HIGH TEMPERATURE AND SMOKE IS DETECTED
ALAEAM STATUS ON , SPRINKLE SYSTEM STATUS ON , FIRE-BRIGADE STATUS CALLING
```

Task-02

```
In [6]: class watering_system:

    def function(self):
        self.soil = input("PLEASE ENTER THE STATE OF SOIL : ")
        # Conditions for DRY
        if self.soil == "DRY" or self.soil == "Dry" or self.soil == "dry":

            print("SOIL IS DRY.")
            print("WATERING SYSTEM IS ON AND WATERING THE FIELDS.")
            print("WATERING SYSTEM IS ACTIVATED.")

        # Conditions for MOIST
        elif self.soil == "Moist" or self.soil == "moist" or self.soil == "MOIST":

            print("SOIL IS MOIST.")
            print("WATERING SYSTEM IS OFF NOW AND NOT WATERING THE FIELDS.")

        # Conditions for WET
        elif self.soil == "WET" or self.soil == "wet" or self.soil == "Wet":

            print("SOIL IS WET")
            print("WATERING SYSTEM IS DEACTIVATED NOW AND NOT WATERING THE FIELDS.")
        else :
            print("GIVEN INPUT IS IN-VALID")

var = watering_system()
var.function()
```

PLEASE ENTER THE STATE OF SOIL : der
GIVEN INPUT IS IN-VALID

In []: