

VIT - Vellore

Name: RONIT MEXSON .

Email: ronit.mexson2024@vitstudent.ac.in

Roll no: 24BAI0036

Phone: 9999999999

Branch: ARUMUGA ARUN R_OOPS

Department: admin

Batch: VL2024250502365

Degree: admin

Scan to verify results



BCSE102P_Structured and Object Oriented Programming Lab_VL2024250502365

VIT V_Structured and OOP_Lab 4_COD_Hard_Union

Attempt : 1

Total Mark : 10

Marks Obtained : 10

Section 1 : Coding

1. Problem Statement

Develop a program to analyze the weather forecast for two days. Create a union named WeatherForecast to manage weather data that has the temperature and precipitation as attributes. Read inputs for two weather models, calculate and print the average temperature, average precipitation, and predicted weather type based on specific conditions.

The predicted weather type calculation is as follows:

"Sunny" if the average temperature is 25 degrees Celsius or higher and the average precipitation is less than 10 mm."Rainy" if the average precipitation is 10 mm or more."Cloudy" otherwise.

Answer

```
// You are using GCC
#include<stdio.h>
union WhetherForecast{
    float temp;
    float rain;
};
int main(){
    union WhetherForecast t1;
    union WhetherForecast t2;
    union WhetherForecast r1;
    union WhetherForecast r2;
    scanf("%f",&t1.temp);
    scanf("%f",&r1.temp);
    scanf("%f",&t2.temp);
    scanf("%f",&r2.rain);
    float a = (t1.temp + t2.temp)/2;
    float b = (r1.rain + r2.rain)/2;
    printf("%.2f degree celsius\n",a);
    printf("%.2f mm\n",b);
    if(a > 25 && b<10){
        printf("sunny");
    }
    else if(b > 10){
        printf("rainy");
    }
    else{
        printf("cloudy");
    }
    return 0;
}
```

Status : Correct

Marks : 10/10