

Aim:

Write a Python program that prompts the user to input a date (year, month, and day) and checks if it is a valid date. If the entered date is valid, the program should increment the date by one day and display the incremented date. The program should take into account leap years when determining the number of days in February.

Source Code:

`validdate.py`

```
import datetime
year = int(input("year: "))
month = int(input("month: "))
day = int(input("day: "))
try:
    current = datetime.date(year,month,day)
    print("valid")
    nextdate = current + datetime.timedelta(days = 1)
    print(f"incremented date:{nextdate.strftime(' %Y-%m-%d')}")
except ValueError:
    print("invalid")
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
year: 2024
month: 12
day: 7
valid
incremented date: 2024-12-08

Test Case - 2
User Output
year: 2023
month: 13
day: 30
invalid

Test Case - 3
User Output
year: 2021
month: 2
day: 29
invalid