

Program 1:

```
import calendar
```

```
# Input format: MM DD YYYY
```

```
date_input = input().split()
```

```
month = int(date_input[0])
```

```
day = int(date_input[1])
```

```
year = int(date_input[2])
```

```
# weekday() returns 0=Monday, 6=Sunday
```

```
day_index = calendar.weekday(year, month, day)
```

```
# List of days in uppercase
```

```
days = ["MONDAY", "TUESDAY", "WEDNESDAY", "THURSDAY", "FRIDAY", "SATURDAY",  
"SUNDAY"]
```

```
print(days[day_index])
```

Program 2:

```
# Input number (3 digits only)
num = int(input("Enter a 3-digit number: "))

# Extract digits
a = num // 100      # hundreds place
b = (num // 10) % 10  # tens place
c = num % 10         # units place

# Calculate Armstrong sum
armstrong_sum = (a**3) + (b**3) + (c**3)

# Check Armstrong condition
if armstrong_sum == num:
    print("it is an Armstrong number")
else:
    print(" it is not an Armstrong number")
```

Program 3:

```
def add(a, b):
    return a + b

def sub(a, b):
    return a - b

# Take input from the user
x = int(input("Enter first number: "))
y = int(input("Enter second number: "))

print("Sum =", add(x, y))
print("Difference =", sub(x, y))
```

Program 4:

my_package/add.py

```
def add(a, b):  
    return a + b
```

my_package/sub.py

```
def sub(a, b):  
    return a - b
```

my_package/_init_.py

main.py

```
from my_package.add import add  
from my_package.sub import sub
```

x = 10

y = 4

```
print("Sum =", add(x, y))
```

```
print("Difference =", sub(x, y))
```

