

Q.4 According to the gregorian calendar, it was Monday on the date 01/01/01. If any year is input through the keyboard write a program to find out what is the day on 1st January of this year.

include <stdio.h>

```

int main() {
    int year, day = 0, i;
    char* week, days[7] = {"Monday", "Tuesday",
                           "Wednesday", "Thursday", "Friday", "Saturday", "Sunday"};
    printf("Enter year: ");
    scanf("%d", &year);
    for (i = 1; i < year; i++) {
        if ((i % 400 == 0) || (i % 4 == 0 && i % 100 != 0))
            days += 366;
        else
            days += 365;
        day = days % 7;
    }
}
```

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```
printf ("On %10d %d, it was %s\n", year,  
week days (days - index));
```

return 0;

}

The Compiler

bin.c

#include <stdio.h>

int main() {

int year, days = 0, i;

char *week_days[] = {"Monday", "Tuesday", "Wednesday",
 "Thursday", "Friday", "Saturday", "Sunday"};

printf("Enter year: ");

scanf("%d", &year);

for (i = 1; i < year; i++) {

if ((i % 400 == 0) || (i % 4 == 0 && i % 100 != 0)) {

days += 366;

} else {

days += 365;

}

}

int day_index = days % 7;

printf("On 01/01/%d, it was a %s.\n", year,
 week_days[day_index]);

return 0;

--

Output

Enter year: 2025
On 01/01/2025, it was a Wednesday.

==== Code Execution Successful ===

The image shows a mobile device displaying a terminal application. The terminal window has tabs for 'bin.c' and 'Output'. The code in 'bin.c' is a C program that calculates the day of the week for January 1st of a given year by summing leap years and regular years. The output shows that on January 1, 2025, it was a Wednesday. The device's home screen icons are visible at the bottom.