

Day 2

Greatest of two numbers

```
# include <stdio.h>
```

```
int main()
```

```
{
```

```
int
```

```
num1, num2;
```

```
num1 = 12, num2 = 13;
```

```
if (num1 == num2)
```

```
printf("both are equal");
```

```
use if (num1 > num2)
```

```
printf("%d is greater",
```

```
else
```

```
printf("%d is greater", num2);
```

```
return 0;
```

```
}
```

out put:

13 is greater

leap year or not.

```
#include <stdio.h>
```

```
int main() {
```

```
    int year;
```

```
    printf("Enter a year: ");
```

```
    scanf("%d", &year);
```

```
    if (year % 400 == 0) {
```

```
        printf("%d is a leap year.", year);
```

```
    }
```

```
    else if (year % 100 == 0) {
```

```
        printf("%d is not a leap year", year);
```

```
    }
```

```
    else if (year % 4 == 0) {
```

```
        printf("%d is a leap year", year);
```

```
    }
```

```
    else {
```

```
        printf("%d is not a leap year.", year);
```

```
    }
```

```
    return 0;
```

```
}
```

out put:

Enter a year : 1900

1900 is not a leap year

```
#include <stdbool.h>
#include <stdio.h>
```

```
bool is_prime(int n)
```

```
{
```

```
if (n == 1 || n == 0)
```

```
return false;
```

```
for (int i = 2; i * i <= n; i++) {
```

```
if (n % i == 0)
```

```
return false;
```

```
}
```

```
return true;
```

```
}
```

```
int main()
```

```
{
```

```
int a = 1;
```

```
int b = 10;
```

```
printf("prime numbers blw %d and %d are:", a, b);
```

```
for (int i = a; i <= b; i++) {
```

```
if (is_prime(i))
```

```
printf("%d ", i);
```

```
}
```

```
return 0;
```

```
}
```

out put:

Prime numbers blw 1 and 10 are: 2 3 5 7

4 sum of digits of a number

```
#include <stdio.h>
```

```
int main (void)
```

```
{
```

```
int num, sum=0, rem;
```

```
printf ("Enter a number:");
```

```
scanf ("%d", &num);
```

```
while (num != 0)
```

```
{
```

```
rem = num % 10;
```

```
sum += rem
```

```
}
```

```
printf ("sum of digits of the number is %d", sum);
```

```
return 0;
```

```
}
```

out put:

Enter a number : 123564

sum of digits of the number is 21.