

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", num1);
```

```
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 b/w %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 b/w 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);
```

```
    for (; num != 0; num /= 10)
```

```
{
```

```
    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.