

## Day - 2 :

5) Greatest of two numbers

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

```
int main() {
```

```
    int num1, num2;
```

```
    printf ("Enter the first number : ");
```

```
    scanf ("%d", &num1);
```

```
    printf ("Enter the second number : ");
```

```
    scanf ("%d", &num2);
```

```
    if (num1 > num2) {
```

```
        printf ("%d is the maximum number.\n", num1);
```

```
    }
```

```
    else if (num2 > num1)
```

```
    {
```

```
        printf ("%d is the maximum number.\n", num2);
```

```
    }
```

```
    else
```

```
    {
```

```
        printf ("Both numbers are equal.\n");
```

```
    }
```

```
    return 0;
```

6) Leap year or not

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

```
int main()
```

```
{
```

```
int year;
```

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

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

```
if ((year % 400 == 0) || ((year % 4 == 0) && (year % 100 != 0)))
```

```
{
```

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

```
}
```

```
else
```

```
{
```

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

```
}
```

```
return 0;
```

```
}
```

7) Prime number within a given range

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

```
int main()
```

```
{
```

```
int low, high, i, flag, temp;
```

```
printf("Enter two numbers (intervals): ");
```

```
scanf("%d %d", &low, &high);
```

```
if (low > high)
```

```
{
```

```
temp = low;
```

```
low = high;
```

```
high = temp;
```

```

}
printf ("prime numbers b/w %d and %d are: "low, high);
while (low <= high)
{
    flag = 0;
    if (low <= 1)
    {
        ++low;
        continue;
    }
    for (i = 2; i <= low / 2; ++i) {
        if (low % i == 0)
        {
            flag = 1;
            break;
        }
    }
    if (flag == 0) {
        printf ("%d ", low);
    }
    ++low;
}
printf ("\n");
return 0;
}

```

8) Sum of digits of a number

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

```
int main()
```

```
{
```

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

```
printf("Enter an integer : ");
```

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

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

```
{
```

```
remainder = num % 10;
```

```
sum = sum + remainder;
```

```
num = num / 10;
```

```
}
```

```
printf("Sum of digits: %d\n", sum);
```

```
return 0;
```

```
}
```