

Problem-1: C program to find the maximum between two numbers

```
#include <stdio.h>

int main()
{
    int num1, num2;

    printf("Enter two numbers: ");
    scanf("%d%d", &num1, &num2);
    if(num1 > num2){
        printf("Maximum = %d", num1);
    }
    else{
        printf("Maximum = %d", num2);
    }
    return 0;
}
```

Output :

```
Enter two numbers: 10 20
Maximum = 20
Process returned 0 (0x0)   execution time : 3.634 s
Press any key to continue.
```

Problem-2: C program to find maximum between three numbers

```
#include <stdio.h>

int main() {
    int a, b, c;
    printf("Enter three numbers: ");
    scanf("%d %d %d", &a, &b, &c);

    if (a >= b && a >= c) {
        printf("Maximum number is: %d\n", a);
    }
    else if (b >= a && b >= c) {
        printf("Maximum number is: %d\n", b);
    }
    else {
        printf("Maximum number is: %d\n", c);
    }

    return 0;
}
```

Output :

```
Enter three numbers: 10 20 15
Maximum number is: 20

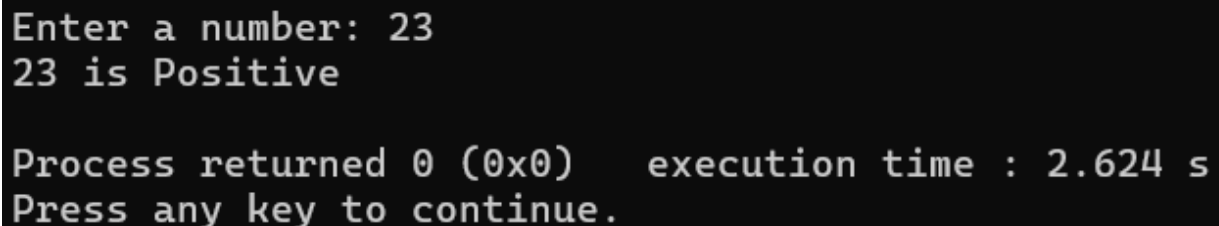
Process returned 0 (0x0)    execution time : 13.197 s
Press any key to continue.
```

Problem-3: C program to check whether a number is positive, negative or zero

```
#include <stdio.h>

int main() {
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    if(num > 0){
        printf("%d is Positive\n", num);
    }
    else if (num < 0){
        printf("%d is Negative\n", num);
    }
    else{
        printf("The number is Zero\n");
    }
    return 0;
}
```

Output :

A screenshot of a terminal window showing the execution of the C program. The user enters the number 23, and the program outputs "23 is Positive". At the bottom, it shows "Process returned 0 (0x0) execution time : 2.624 s" and "Press any key to continue.".

```
Enter a number: 23
23 is Positive

Process returned 0 (0x0)   execution time : 2.624 s
Press any key to continue.
```

Problem-4: C program to check whether a number is divisible by 5 and 11 or not

```
#include <stdio.h>

int main() {
    int num;

    printf("Enter a number: ");
    scanf("%d", &num);
    if (num % 5 == 0 && num % 11 == 0) {
        printf("%d is divisible by both 5 and 11\n", num);
    }
    else {
        printf("%d is not divisible by both 5 and 11\n", num);
    }
    return 0;
}
```

Output :

```
Enter a number: 55
55 is divisible by both 5 and 11

Process returned 0 (0x0)    execution time : 11.968 s
Press any key to continue.
```

Problem-5: C program check whether a number is even or odd

```
#include <stdio.h>

int main() {
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    if(num % 2 == 0){
        printf("%d is Even\n", num);
    }
    else{
        printf("%d is Odd\n", num);
    }
    return 0;
}
```

Output :

```
Enter a number: 10
10 is Even

Process returned 0 (0x0)    execution time : 3.001
Press any key to continue.
```

Problem-6: C program to check Leap Year

```
#include <stdio.h>

int main() {
    int year;
    printf("Enter a year: ");
    scanf("%d", &year);

    if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0)) {
        printf("%d is a Leap Year\n", year);
    }
    else {
        printf("%d is not a Leap Year\n", year);
    }
    return 0;
}
```

Output :

```
Enter a year: 2004
2004 is a Leap Year

Process returned 0 (0x0)    execution time : 6.420 s
Press any key to continue.
```

Problem-7: C program to check whether a character is alphabet or not

```
#include <stdio.h>

int main() {
    char ch;
    printf("Enter a character: ");
    scanf("%c", &ch);
    if ((ch >= 'A' && ch <= 'Z') || (ch >= 'a' && ch <= 'z')) {
        printf("%c is an Alphabet\n", ch);
    }
    else {
        printf("%c is not an Alphabet\n", ch);
    }
    return 0;
}
```

Output :

```
Enter a character: A
A is an Alphabet

Process returned 0 (0x0)    execution time : 4.709 s
Press any key to continue.
```

Problem-8: C program to check vowel or consonant

```
#include <stdio.h>

int main() {
    char ch;
    printf("Enter an alphabet: ");
    scanf("%c", &ch);
    if ((ch >= 'A' && ch <= 'Z') || (ch >= 'a' && ch <= 'z')) {
        if (ch == 'A' || ch == 'E' || ch == 'I' || ch == 'O' || ch == 'U' ||
            ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u') {
            printf("%c is a Vowel\n", ch);
        }
        else {
            printf("%c is a Consonant\n", ch);
        }
    }
    else {
        printf("%c is not an alphabet\n", ch);
    }
    return 0;
}
```

Output :

```
Enter an alphabet: a
a is a Vowel

Process returned 0 (0x0)    execution time : 1.867
Press any key to continue.
```


Problem-9: C program to check whether a character is alphabet, digit or special character

```
#include <stdio.h>

int main() {
    char ch;
    printf("Enter a character: ");
    scanf("%c", &ch);
    if ((ch >= 'A' && ch <= 'Z') || (ch >= 'a' && ch <= 'z')) {
        printf("%c is an Alphabet\n", ch);
    }
    else if (ch >= '0' && ch <= '9') {
        printf("%c is a Digit\n", ch);
    }
    else {
        printf("%c is a Special Character\n", ch);
    }
    return 0;
}
```

Output :

```
Enter a character: 3
3 is a Digit

Process returned 0 (0x0)    execution time : 1.581 s
Press any key to continue.
```

Problem-10: C program to check whether a character is Uppercase or Lowercase

```
#include <stdio.h>

int main() {
    char ch;
    printf("Enter a character: ");
    scanf("%c", &ch);
    if (ch >= 'A' && ch <= 'Z') {
        printf("%c is Uppercase\n", ch);
    }
    else if (ch >= 'a' && ch <= 'z') {
        printf("%c is Lowercase\n", ch);
    }
    else {
        printf("%c is not an alphabet\n", ch);
    }
    return 0;
}
```

Output :

```
Enter a character: b
b is Lowercase

Process returned 0 (0x0)    execution time : 2.840 s
Press any key to continue.
```