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

```c
#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: 5 9
Maximum = 9

=== Code Execution Successful ===
```

Problem-2: C program to find maximum between

three numbers

```c
#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: 7 8 9
Maximum number is: 9


=== Code Execution Successful ===
```

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

```c
#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 :

```
Enter a number: 67
67 is Positive


=== Code Execution Successful ===
```

Problem-4: C program to check whether a number is

divisible by 5 and 11 or not

```c
#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: 110
110 is divisible by both 5 and 11


=== Code Execution Successful ===
```
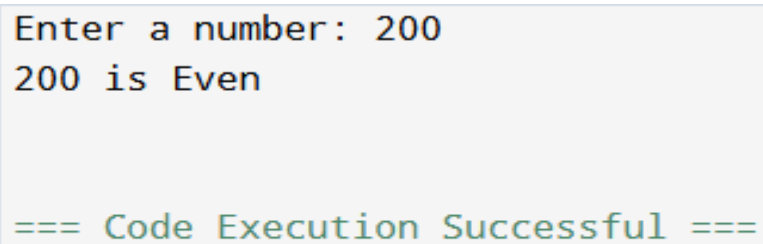
Problem-5: C program check whether a number is

even or odd


```c
#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: 200
200 is Even


=== Code Execution Successful ===
```

Problem-6: C program to check Leap Year

```c
#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


=== Code Execution Successful ===
```

Problem-7: C program to check whether a

character is alphabet or not


```c
#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: i
i is an Alphabet


=== Code Execution Successful ===
```

Problem-8: C program to check vowel or

consonant

```c
#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 a character: f
f is an Alphabet


=== Code Execution Successful ===
```

Problem-9: C program to check whether a

character is alphabet, digit or special character

```c
#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: &
& is a Special Character


=== Code Execution Successful ===
```

Problem-10: C program to check whether a

character is Uppercase or Lowercase

```c
#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: H
H is Uppercase


=== Code Execution Successful ===
```