

1. Write a program to print numbers from 1 to 100.

IPO

Input: Enter a value as a input.

Process: To print numbers from 1 to 100.

Output: output the variable

Program:

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

```
int main()
```

```
{
```

```
    int i;
```

```
    for (i = 1; i <= 100; i++)
```

```
    {
```

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

```
    }
```

```
    return 0;
```

```
}
```

Output:

1

2

3

4

5

6

7

8

9

10

11

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99
100

2. Write a program to print even numbers from 1 to 50.

IPO

Input: Enter a value as a input.

Process: To print even numbers from 1 to 50.

Output: output the variable

Program:

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

```

int main() {
    int i;

    printf("Even numbers from 1 to 50 are:\n");
    for (i = 1; i <= 50; i++) {
        if (i % 2 == 0) {
            printf("%d ", i);
        }
    }

    return 0;
}

```

Output:

Output	Clear
Even numbers from 1 to 50 are: 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50	

3. Write a program to find the factorial of a number.

IPO

Input: Enter a value as a input.

Process: To find the factorial of a number.

Output: output the variable

Program:

```

#include <stdio.h>
int main()
{
    int n, fact, i;
    fact = 1;
    scanf("%d", &n);
    for(i = 1; i <= n; i++)
        fact *= i;
    printf("%ld", fact);
    return 0;
}

```

Output:

```
Output
Enter a number6
720
```

4. Write a program to calculate the sum of digits of a number.

IPO

Input: Enter a value as a input.

Process: To calculate the sum of digits of a number.

Output: output the variable

Program:

```
#include <stdio.h>
int main()
{
    int num, sum = 0, digit;
    printf("Enter a number: ");
    scanf("%d", &num);
    while (num != 0)
    {
        digit = num % 10;
        sum += digit;
        num /= 10;
    }
    printf("Sum of digits = %d\n", sum);
    return 0;
}
```

Output:

```
Output
Enter a number: 1234
Sum of digits = 10
```

5. Write a program to reverse a number.

IPO

Input: Enter a value as a input.

Process: To reverse a number.

Output: output the variable

Program:

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

```
int main()
```

```
{
```

```
    int num, rev = 0, digit;
```

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

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

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

```
    {
```

```
        digit = num % 10;
```

```
        rev = rev * 10 + digit;
```

```
        num /= 10;
```

```
    }
```

```
    printf("Reversed number = %d\n", rev);
```

```
    return 0;
```

```
}
```

Output:

Output

Enter a number: 9867

Reversed number = 7689

6. Write a program to check whether a number is a palindrome.

IPO

Input: Enter a value as a input.

Process: To check whether a number is a palindrome..

Output: output the variable

Program:

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

```
int main()
```

```
{
```

```
    int num, original, reversed = 0, digit;
```

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

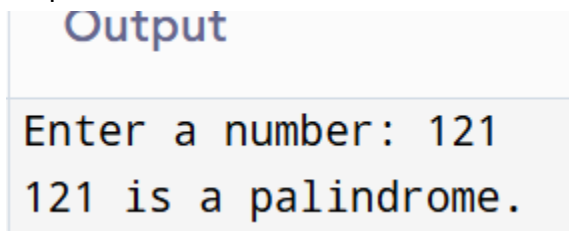
```

scanf("%d", &num);
original = num;
while (num != 0)
{
    digit = num % 10;
    reversed = reversed * 10 + digit;
    num /= 10;
}
if (original == reversed)
    printf("%d is a palindrome.\n");
else
    printf("%d is not a palindrome.\n");

return 0;
}

```

Output:



The screenshot shows a terminal window with the word 'Output' in blue at the top. Below it, the text 'Enter a number: 121' is displayed on one line, and '121 is a palindrome.' is displayed on the next line.

7. Write a program to print multiplication table of a number.

IPO

Input: Enter a value as a input.

Process: To print multiplication table of a number.

Output: output the variable

Program:

```

#include <stdio.h>
int main()
{
    int num, i;
    printf("Enter a number: ");
    scanf("%d", &num);
    printf("Multiplication Table of %d:\n", num);
    for(i = 1; i <= 10; i++)
    {
        printf("%d x %d = %d\n", num, i, num * i);
    }

    return 0;
}

```

```
}
```

Output:

```
Enter a number: 5
Multiplication Table of 5:
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

8. Write a program to count the number of digits in a number.

IPO

Input: Enter a value as a input.

Process: To count the number of digits in a number.

Output: output the variable

Program:

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

```
int main()
```

```
{
```

```
    int num, count = 0;
```

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

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

```
    if (num == 0)
```

```
    {
```

```
        count = 1;
```

```
    }
```



```

else
{
    while (num != 0)
    {
        num /= 10;
        count++;
    }
}
printf("Number of digits = %d\n", count);
return 0;
}

```

Output:

```

Output

Enter a number: 12345
Number of digits = 5

```

9. Write a program to print the Fibonacci series up to n terms.

IPO

Input: Enter a value as a input.

Process: To print the Fibonacci series up to n terms.

Output: output the variable

Program:

```

#include <stdio.h>
int main()
{
    int n, i;
    int a = 0, b = 1, next;
    printf("Enter the number of terms: ");
    scanf("%d", &n);
    printf("Fibonacci Series: ");
    for (i = 1; i <= n; i++)
    {
        printf("%d ", a);
        next = a + b;
        a = b;
        b = next;
    }
    return 0;
}

```

```
}
```

Output:

Output

```
Enter the number of terms: 6
Fibonacci Series: 0 1 1 2 3 5
```

10. Write a program to calculate the sum of the first n natural numbers.

IPO

Input: Enter a value as a input.

Process: To calculate the sum of the first n natural numbers.

Output: output the variable

Program:

```
#include <stdio.h>
int main()
{
    int n, sum;
    printf("Enter a positive integer: ");
    scanf("%d", &n);
    sum = n * (n + 1) / 2;
    printf("Sum of first %d natural numbers is %d\n", n, sum);
    return 0;
}
```

Output:

Output

```
Enter a positive integer: 24
Sum of first 24 natural numbers is 300
```