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1. Write a program to print unit digit of a given number

Source code

```
#include<stdio.h>
int main()
{
    int N;
    printf("enter a number");
    scanf("%d",&N);
    printf("%d",N%10);
    return 0;
}
```

2. Write a program to print a given number without its last digit.

```
#include<stdio.h>
int main ()
{
    int num,digit;
    printf("enter a number of digit");
    scanf("%d",&num);

    digit=num%10;
    printf("Last Digit of %d is: %d", num, digit);
    return 0;
}
```

3. Write a program to swap values of two int variables

```
#include<stdio.h>
int main() {
    double first, second, temp;
    printf("Enter first number: ");
    scanf("%lf", &first);
    printf("Enter second number: ");
    scanf("%lf", &second);

    temp = first;
```

```
    first = second;
```

```
    second = temp;
```

```
    // %.2lf displays number up to 2 decimal points
    printf("\nAfter swapping, first number = %.2lf\n", first);
    printf("After swapping, second number = %.2lf", second);
    return 0;
}
```

4. Write a program to swap values of two int variables without using a third variable.

```
#include<stdio.h>
int main()
{
    int a=10, b=20;
    printf("Before swap a=%d b=%d",a,b);

    a=a+b;//a=30 (10+20)
    b=a-b;//b=10 (30-20)
    a=a-b;//a=20 (30-10)
    printf("\nAfter swap a=%d b=%d",a,b);
    return 0;
}
```

5Write a program to input a three-digit number and display the sum of the digits.

```
#include <stdio.h>
int main()
{
    int n,l,f,m,sum,t1;
    printf("Enter 3-Digit Number: ");
    scanf("%d",&n);
    f=n/100;
    t1=n%100;
    l=t1/10;
    m=t1%10;
    printf("\nFirst Digit = %d \nMiddle Digit = %d \nLast Digit = %d\n",f,m,l);
    sum=l+m+f;
    printf("\nSum of All 3-Digits : %d",sum);
    return 0;
}
```

6Write a program which takes a character as an input and displays its ASCII code.

```
#include <stdio.h>
int main() {
    char c;
    printf("Enter a character: ");
    scanf("%c", &c);

    // %d displays the integer value of a character
    // %c displays the actual character
    printf("ASCII value of %c = %d", c, c);

    return 0;
}
```

7Write a program to find the position of first 1 in LSB.

```
#include <stdio.h>
void main()
{
    int n, len, pos = 0, i = 0, count = 0;

    printf("***Finding the position of 1-bits in a number for given length**\n");
    printf("enter a number\n");
    scanf("%d", &n);
    printf("enter the length\n");
    scanf("%d", &len);
    while (i <= 32)
    {
        if ((n & 1) == 1)    //checking whether there is a 1-bit in the current position
        {
            count++; //counting the consecutive 1's in the integer
            pos = i;
            if (count == len)    //checking whether the length matches
            {
                break;
            }
        }
        if ((n & 1) == 0)
        {
            count = 0;
        }
        n = n >> 1;
        i++;
    }
    printf("the position of 1 in the string : %d\n", pos);
}
```

8Write a program to check whether the given number is even or odd using a bitwise operator.

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

```
int main()
{
```

```
    /* Input number from user */
    printf("Enter any number: ");
    scanf("%d", &num);
```

```
    if(num & 1)
    {
        printf("%d is odd.", num);
    }
    else
    {
        printf("%d is even.", num);
    }
```

```
    return 0;
}
```

9. Write a program to print size of an int, a float, a char and a double type variable

```
#include<stdio.h>
int main() {
    int intType;
    float floatType;
    double doubleType;
    char charType;

    // sizeof evaluates the size of a variable
    printf("Size of int: %zu bytes\n", sizeof(intType));
    printf("Size of float: %zu bytes\n", sizeof(floatType));
    printf("Size of double: %zu bytes\n", sizeof(doubleType));
    printf("Size of char: %zu byte\n", sizeof(charType));

    return 0;
}
```

10. Write a program to make the last digit of a number stored in a variable as zero.
(Example - if x=2345 then make it x=2340)

```
#include<stdio.h>
int main ()
{
    int a;
    printf("Enter a number");
    scanf("%d",&a);

    a=a/10;
    a=a*10;
```

```
    printf("output of a number is %d",a);
    return 0;
}
```

11Write a program to input a number from the user and also input a digit. Append a digit in the number and print the resulting number.

Source code

```
#include<stdio.h>
int main ()
{
    int x,r,s=0;
    printf("Enter a number");
    scanf("%d",&x);
    int m=x/10;

    while(x!=0)
```

```

{
    r=x%10;
    s=s+r;
    x=x/10;
    r=x;
}

```

```

printf("sum of a number= %d",m,s);

```

```

    return 0;
}

```

12 Assume price of 1 USD is INR 76.23. Write a program to take the amount in INR and convert it into USD.

Source code

```

#include<stdio.h>

```

```

int main ()

```

```

{
    float INR,USD;
    printf("Enter a INR ");
    scanf("%f",&INR);

```

```

    USD=INR/76.23;

```

```

    printf("INR in USD =%f",USD);
    return 0;

```

```

}
/*Write a program to take a three-digit number from the user and rotate its digits by
one position towards the right.*/

```

```

#include<stdio.h>

```

```

int main ()

```

```

{
    int num,r;
    printf("Enter a number ");
    scanf("%d",&num);

```

```

    while(num>0)

```

```

{
    r=num%10;
    printf("76%d",r);
    num=num/10;

```

```

}
return 0;

```

```

}

```