

61. Program to calculate Square of 'n' numbers.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n, r, i, sqr=0;
    clrscr();
    printf("\nEnter the range : ");
    scanf("%d", &r);

    for (i = 1; i <= r; i++)
    {
        n = i;
        sqr = n * n;
        printf("\nSquare of %d is : %d .", n, sqr);
    }
    getch();
}
```

62. Program to take an alphabet from user and check whether it is a vowel or not.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    char ch;
    clrscr();
    printf("Enter an alphabet : ");
    scanf("%c", &ch);

    if (ch=='a' || ch=='A' || ch=='e' || ch=='E' || ch=='i' || ch=='I' || ch=='o' || ch=='O'
    || ch=='u' || ch=='U')
        printf("%c is a vowel.", ch);
    else
        printf("%c is not a vowel.", ch);
    getch();
}
```

63. Program to take two numbers and check whether they are amicable numbers or not.

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

//check function
int check(int a, int b)
{
```

```

int s = 0, i;
for (i = 1; i < a; i++)
{
    if (a % i == 0)
    {
        s = s + i;
    }
}

if (s == b)
{
    s = 0;
    for (i = 1; i < b; i++)
    {
        if (b % i == 0)
        {
            s = s + i;
        }
    }

    if (s == a)
        return 1;
    else
        return 0;
}
return 0;
}

void main()
{
    int a, b;
    clrscr();
    printf("Enter 1st number : ");
    scanf("%d", &a);
    printf("Enter 2nd number : ");
    scanf("%d", &b);

    if (check(a, b))
    {
        printf("\n%d and %d are Amicable Numbers.", a, b);
    }
    else
    {
        printf("\n%d and %d are not Amicable Numbers.", a, b);
    }
}

```

64. Program to accept a number and print the factors of that number.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n, i;
    clrscr();
    printf("Enter a number : ");
    scanf("%d", &n);
    printf("Factors of %d are : ", n);
    for (i = 1; i <= n; ++i)
    {
        if (n % i == 0)
            printf("\n%d ", i);
    }
    getch();
}
```

65. Program to accept two integer numbers and print the GCD (Greatest Common Divisor).

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int x, y, m, i;
    clrscr();
    printf("Enter 1st number : ");
    scanf("%d", &x);
    printf("Enter 2nd number : ");
    scanf("%d", &y);

    if (x > y)
        m = y;
    else
        m = x;

    for (i = m; i >= 1; i--)
    {
        if (x % i == 0 && y % i == 0)
        {
            printf("GCD of two number is : %d", i);
            break;
        }
    }
    getch();
}
```

66. Program to find power of number.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int base, expo;
    int value = 1;
    clrscr();
    printf("Enter base number : ");
    scanf("%d", &base);
    printf("Enter exponent number : ");
    scanf("%d", &expo);

    while (expo != 0)
    {
        // value = value * base;
        value *= base;
        --expo;
    }
    printf("Answer : %d", value);
    getch();
}
```

67. Program to calculate HCF & LCM.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int a, b, x, y, t, hcf, lcm;
    clrscr();
    printf("Enter two numbers : ");
    scanf("%d%d", &x, &y);

    a = x;
    b = y;

    while (b != 0)
    {
        t = b;
        b = a % b;
        a = t;
    }

    hcf = a;
    lcm = (x * y) / hcf;

    printf("\nHighest Common Factor of %d and %d : %d", x, y, hcf);
    printf("\nLeast Common Multiple of %d and %d : %d", x, y, lcm);
}
```

```

    getch();
}

```

68. Program to find largest among 3 numbers using ternary operator.

```

#include<stdio.h>
#include<conio.h>
void main()
{
    int a, b, c, big;
    clrscr();
    printf("Enter 3 numbers : ");
    scanf("%d %d %d", &a, &b, &c);

    big = (a > b && a > c ? a : b > c ? b : c);
    printf("\nThe biggest number is : %d", big);
    getch();
}

```

69. Program to find largest number of 'n' numbers.

```

#include<stdio.h>
#include<conio.h>
void main()
{
    int n, num, i;
    int big;
    clrscr();
    printf("Enter total numbers : ");
    scanf("%d", &n);

    printf("Number %d : ", 1);
    scanf("%d", &big);

    for (i = 2; i <= n; i++)
    {
        printf("Number %d : ", i);
        scanf("%d", &num);

        if (big < num)
            big = num;
    }

    printf("Largest number is : %d", big);
    getch();
}

```

70. Program to check whether the number is neon number or not.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n, sq, i, sum = 0;
    clrscr();
    printf("Enter the number : ");
    scanf("%d", &n);

    sq = n * n;

    for (i = sq; i > 0; i = i / 10)
        sum = sum + i % 10;

    if (sum == n)
        printf("%d is a neon number.", n);
    else
        printf("%d is not a neon number.", n);
    getch();
}
```

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