



```
1 //EXERCICIO 1
2
3 #include <stdio.h>
4 #include <math.h>
5
6 float DistanciaEuclidiana(x1, x2, y1, y2)
7 {
8     float P1 = pow(x2 - x1, 2);
9     float P2 = pow(y2 - y1, 2);
10
11     float Dist = sqrt((P1) + (P2));
12
13     return Dist;
14 }
15
16 int main()
17 {
18     float x1, x2;
19     float y1, y2;
20
21     printf("Digite as coordenadas do PONTO 1(x1, y1): ");
22     scanf("%f%f", &x1, &y1);
23
24     printf("Digite as coordenadas do PONTO 2(x2, y2): ");
25     fflush(stdin);
26     scanf("%f%f", &x2, &y2);
27
28     printf("\nDistancia Euclidiana: %.2f", DistanciaEuclidiana(x1, x2, y1, y2));
29
30     return 0;
31 }
```



```
1  //EXERCICIO 2
2
3  #include <stdio.h>
4
5  int fatorial(num)
6  {
7      int fat;
8      for (fat = 1; num > 1; num = num - 1)
9      {
10         fat = fat * num;
11     }
12
13     return fat;
14 }
15
16 int main()
17 {
18     int num;
19
20     printf("Digite um valor: ");
21     scanf("%d", &num);
22
23     printf("Fatorial de %d! = %d", num, fatorial(num));
24
25     return 0;
26 }
```



```
1 //EXERCICIO 3
2
3 #include <stdio.h>
4
5 int somatorio(n)
6 {
7     int soma = 0, cont;
8     for (cont = 1; cont < n; cont++)
9     {
10         soma += n;
11     }
12
13     return soma;
14 }
15
16 int main()
17 {
18     int n;
19
20     printf("Digite um valor: ");
21     scanf("%d", &n);
22
23     printf("Somatório de %d ate %d = %d", 1, n, somatorio(n));
24
25     return 0;
26 }
```



```
1 //EXERCICIO 4
2
3 #include <stdio.h>
4 #include <math.h>
5
6 int somaAlgarismo(num)
7 {
8     int soma = 0, resto;
9     while (num > 0)
10    {
11        resto = num % 10;
12        soma += resto;
13        num = num / 10;
14    }
15
16    return soma;
17 }
18
19 int main()
20 {
21     int num;
22
23     printf("Digite um valor: ");
24     scanf("%d", &num);
25
26     printf("\nSoma dos algarismo de %d = %d", num, somaAlgarismo(num));
27
28     return 0;
29 }
```

```
1 // EXERCICIO 5
2
3 #include <stdio.h>
4
5 int isPrimo(num)
6 {
7     int cont, result = 0;
8     for (cont = 2; cont <= num / 2; cont++)
9     {
10         if (num % cont == 0)
11         {
12             result++;
13             break;
14         }
15     }
16
17     if (result == 0)
18     {
19         printf("\n%d eh primo", num);
20     }
21     else
22     {
23         printf("\n%d nao eh primo", num);
24     }
25 }
26
27 int main()
28 {
29     int num, M, contPrimo = 0, contDiv = 0;
30
31     printf("\nDigite um valor: ");
32     scanf("%d", &num);
33     printf("%d", isPrimo(num));
34
35     printf("\nDigite outro numero:");
36     scanf("%d", &M);
37
38     for (int cont = 1; contPrimo < M; cont++)
39     {
40
41         for (int j = 1 + 0; j <= cont; j++)
42         {
43             if (cont % j == 0)
44             {
45                 contDiv++;
46             }
47         }
48
49         if (contDiv == 2)
50         {
51             contPrimo++;
52             printf("%d ", cont);
53         }
54         contDiv = 0;
55     }
56
57     return 0;
58 }
```

```
1 //EXERCICIO 6
2
3 #include <stdio.h>
4 #include <math.h>
5
6 int MMC(num1, num2)
7 {
8
9     int resto, n1, n2;
10
11     n1 = num1;
12     n2 = num2;
13
14     do
15     {
16         resto = n1 % n2;
17
18         n1 = n2;
19         n2 = resto;
20
21     } while (resto != 0);
22
23     return (num1 * num2) / n1;
24 }
25
26 int MDC(num1, num2)
27 {
28     int resto;
29
30     do
31     {
32         resto = num1 % num2;
33
34         num1 = num2;
35         num2 = resto;
36
37     } while (resto != 0);
38
39     return num1;
40 }
41
42 int main()
43 {
44     int num1, num2;
45
46     printf("Digite dois valores: ");
47     scanf("%d%d", &num1, &num2);
48     if (num1 < 0 || num2 < 0)
49     {
50         printf("Digite dois valores POSITIVOS: ");
51         scanf("%d%d", &num1, &num2);
52     }
53
54     printf("MMC: %d", MMC(num1, num2));
55     printf("\nMDC: %d", MDC(num1, num2));
56
57     return 0;
58 }
```



```
1  /EXERCICIO 7
2
3  #include <stdio.h>
4
5  typedef struct sRacional
6  {
7      int n, d; //numerador e denominador
8  } Racional;
9
10 float soma(x, y)
11 {
12     return x + y;
13 }
14
15 float sub(x, y)
16 {
17     return x - y;
18 }
19
20 float div(x, y)
21 {
22     return x / y;
23 }
24
25 float multi(x, y)
26 {
27     return x * y;
28 }
29
30 int main()
31 {
32     Racional num;
33
34     printf("Digite dois valores: ");
35     scanf("%d%d", &num.n, &num.d);
36
37     printf("\nSoma: %.2f", soma(num.n, num.d));
38     printf("\nSubtracao: %.2f", sub(num.n, num.d));
39     printf("\nDivisao: %.2f", div(num.n, num.d));
40     printf("\nMultiplicacao: %.2f", multi(num.n, num.d));
41
42     return 0;
43 }
```