

Exercício 1

Ex1.c

```
1 #include<stdio.h>
2 #include<math.h>
3 int main(void){
4     float p,a,i;
5
6     printf("Peso e altura? ");
7     scanf("%f %f",&p,&a);
8     i = p/pow(a,2);
9     printf("IMC = %.2f\n",i);
10
11     return 0;
12 }
13
```

C:\Users\cloud\OneDrive - Fat x + v

Peso e altura? 66 1.74
IMC = 21.80

Process exited after 8.227 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

Exercício 2

Ex1.c

Ex2.c

```
1 #include<stdio.h>
2 #include<math.h>
3
4 int main(void){
5     float p,a,i;
6
7     printf("Peso e altura?");
8     scanf("%f %f",&p,&a);
9     i = p/pow(a,2);
10
11     printf("IMC = %.2f\n",i);
12
13     if(i<18.5) puts("Magra");
14     else if(i>30) puts("Obesa");
15     else puts("Normal");
16
17     return 0;
18 }
19
```

C:\Users\cloud\OneDrive - Fat x + v

Peso e altura?66 1.74
IMC = 21.80
Normal

Process exited after 5.802 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

Exercício 3

Ex1.c

Ex2.c

Ex3.c

```
1 #include<stdio.h>
2
3 int main(void){
4     int p;
5     printf("Placa? ");
6     scanf("%d",&p);
7     switch(p%10){
8         case 1: case 2: puts("Segunda-feira"); break;
9         case 3: case 4: puts("Terca-feira"); break;
10        case 5: case 6: puts("Quarta-feira"); break;
11        case 7: case 8: puts("Quinta-feira"); break;
12        default: puts("Sexta-feira");
13    }
14    return 0;
15 }
16
```

C:\Users\cloud\OneDrive - Fat x + v

Placa? 2
Segunda-feira

Process exited after 4.474 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

Exercício 4

```

1 #include<stdio.h>
2
3 int main(void){
4     int n,f;
5
6     printf("Numero? ");
7     scanf("%d",&n);
8     f = 1;
9
10    for(int i=2; i<=n; i++)
11        f *= i;
12    printf("Fatorial: %d\n",f);
13
14    return 0;
15 }

```

```

C:\Users\cloud\OneDrive - Fat
Numero? 6
Fatorial: 720

-----
Process exited after 7.418 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

```

Exercício 5

```

1 #include<stdio.h>
2
3 int main(void){
4     int n;
5
6     printf("Numero? ");
7     scanf("%d", &n);
8
9     int s=0;
10
11    while(n>0){
12        s += n%10;
13        n /= 10;
14    }
15    printf("Soma dos digitos = %d\n",s);
16
17    return 0;
18 }

```

```

C:\Users\cloud\OneDrive - Fat
Numero? 69
Soma dos digitos = 15

-----
Process exited after 6.132 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

```

Exercício 6

```

1 #include<stdio.h>
2 #include<time.h>
3 #include<stdlib.h>
4
5 int main(void){
6     srand(time(NULL));
7     int c,n = rand()%7+1;
8
9     do{
10        printf("Chute entre 1 e 7: ");
11        scanf("%d",&c);
12        if(c<n) puts("Baixo!");
13        else if(c>n) puts("Alto!");
14    }while(n!=c);
15
16    puts("Acertou!");
17
18    return 0;
19 }

```

```

C:\Users\cloud\OneDrive - Fat
Chute entre 1 e 7: 5
Alto!
Chute entre 1 e 7: 4
Alto!
Chute entre 1 e 7: 1
Baixo!
Chute entre 1 e 7: 3
Alto!
Chute entre 1 e 7: 2
Acertou!

-----
Process exited after 21.71 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

```

Exercício 7

```

1  #include<stdio.h>
2
3  int fat(int n){
4      int f=1;
5      for(int i=2; i<=n; i++)f *= i;
6      return f;
7  }
8
9  int main(void){
10     printf("Fatorial do 5: %d\n", fat(5));
11     return 0;
12 }
13

```

```
C:\Users\cloud\OneDrive - Fat > + v
Fatorial do 5: 120

-----
Process exited after 0.08376 seconds with return value 0
Pressione qualquer tecla para continuar. . .
```

Exercício 8

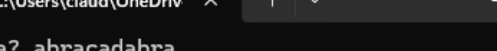
Ex1.c	Ex2.c	Ex3.c	Ex4.c	Ex5.c	Ex6.c	Ex7.c	Ex8.c
1	#include<stdio.h>						
2							
3	void barras(int v[],int n){						
4	for(int i=0; i<n; i++){						
5	for(int j=0; j<v[i]; j++)						
6	putchar(220);						
7	putchar('\n');						
8	}						
9	}						
10							
11	int main(void){						
12	int a[4] = {3,4,2,1};						
13	int b[3] = {9,4,7};						
14	barras (a,4);						
15	getchar();						
16	barras (b,3);						
17							
18	return 0;						
19	}						

A screenshot of a Windows File Explorer window. The address bar shows the path 'C:\Users\claud\OneDrive -'. The window is dark-themed. On the left sidebar, there are several horizontal bars of varying lengths, likely representing a file list or navigation pane. The main area of the window is mostly black, suggesting a dark background or a very dark image.

Exercício 9

```
Ex1.c Ex2.c Ex3.c Ex4.c Ex5.c Ex6.c Ex7.c Ex8.c Ex9.c
```

```
1 #include<stdio.h>
2 #include<string.h>
3
4 int main(void){
5     char s[256];
6     printf("Senha? ");
7     gets(s);
8     if (strcmp(s,"abracadabra")==0) puts("Ok!");
9     else puts("Senha invalida!");
10    return 0;
11 }
```



A screenshot of a Windows command prompt window. The title bar shows the file explorer path 'C:\Users\claud\OneDrive' and standard window controls. The command prompt displays the text 'Senha? abracadabra' followed by 'Ok!' on the next line. A horizontal dashed line separates this from the next output, which reads 'Process exited after 14.34 seconds with return value 0'. The final line shows 'Pressione qualquer tecla para continuar.' followed by a cursor.

```

C:\Users\claud\OneDrive >
Senha? abracadabra
Ok!

-----
Process exited after 14.34 seconds with return value 0
Pressione qualquer tecla para continuar. . . |
  
```

Exercício 10

```

Ex1.c Ex2.c Ex3.c Ex4.c Ex5.c Ex6.c Ex7.c Ex8.c Ex9.c Ex10.c
1  #include<stdio.h>
2
3  typedef struct {float x; float y; } Ponto;
4
5  int main(void){
6      Ponto p = {1.5,2.5};
7      printf("(%.1f,%.1f)\n",p.x,p.y);
8      return 0;
9  }
10

```

```

C:\Users\cloud\OneDrive - Fat x + v - □ x
(1.5,2.5)
-----
Process exited after 0.0603 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

```

Exercício 11

```

Ex1.c Ex2.c Ex3.c Ex4.c Ex5.c Ex6.c Ex7.c Ex8.c Ex9.c Ex10.c Ex11.c
1  #include <stdio.h>
2
3  int main(void) {
4      int v =5; // variável simples
5      int*p; // variável ponteiro
6      p = &v;
7      *p =*p +2;
8      printf("v=%d, *p=%d\n",v,*p);
9
10     return 0;
11 }

```

```

C:\Users\cloud\OneDrive - Fat x + v - □ x
v=7, *p=7
-----
Process exited after 0.08115 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

```

Exercício 12

```

Ex1.c Ex2.c Ex3.c Ex4.c Ex5.c Ex6.c Ex7.c Ex8.c Ex9.c Ex10.c
1  #include <stdio.h>
2
3  void troca(int a, int b) {
4      int c = a;
5      a = b;
6      b = c;
7  }
8
9  int main(void) {
10     int x = 5, y = 3;
11     troca(x, y);
12     printf("x: %d y: %d", x, y);
13 }

```

```

C:\Users\cloud\OneDrive - Fat x + v - □ x
x: 5 y: 3
-----
Process exited after 0.06022 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

```

Exercício 13

```

Ex1.c Ex2.c Ex3.c Ex4.c Ex5.c Ex6.c Ex7.c Ex8.c Ex9.c
1  #include <stdio.h>
2  void troca(int *a, int *b) {
3      int c = *a;
4      *a = *b;
5      *b = c;
6  }
7
8
9  int main(void) {
10     int x = 5, y = 3;
11     troca(&x, &y);
12     printf("x: %d y: %d", x, y);
13 }

```

```

C:\Users\cloud\OneDrive - Fat x + v - □ x
x: 3 y: 5
-----
Process exited after 0.06849 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

```

Exercício 14

```

Ex1.c Ex2.c Ex3.c Ex4.c Ex5.c Ex6.c Ex7.c Ex8.c Ex9.c Ex10.c Ex11.c Ex12.c Ex14.c
1  #include<stdio.h>
2  #include<stdlib.h>
3
4  float media(float v[],int n){
5      float s = 0;
6
7      for(int i=0; i<n; i++){
8          s += v[i];
9      }
10     return s/n;
11 }
12
13 int main(void){
14     int n;
15
16     printf("Quantidade de numeros? ");
17     scanf("%d",&n);
18
19     float *v = malloc(n*sizeof(float));
20
21     for(int i=0; i<n; i++){
22         printf("do numero? ",i+1);
23         scanf("%f",&v[i]);
24     }
25
26     printf("Media = %.2f\n",media(v,n));
27     return 0;

```

```

C:\Users\cloud\OneDrive - Fat X + v
Quantidade de numeros? 6
1o numero? 5
2o numero? 8
3o numero? 1
4o numero? 9
5o numero? 10
6o numero? 7
Media = 6.67

-----
Process exited after 17.38 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

```

Exercício 15

```

Ex1.c Ex2.c Ex3.c Ex4.c Ex5.c Ex6.c Ex7.c Ex8.c Ex9.c Ex10.c Ex11.c Ex12.c Ex14.c Ex15.c
1  #include<stdio.h>
2  #include<stdlib.h>
3
4  typedef struct no *Ptr;
5  struct no{int item; Ptr prox;};
6
7  Ptr no(int x,Ptr p){
8      Ptr n = malloc(sizeof(struct no));
9      n->item = x;
10     n->prox = p;
11     return n;
12 }
13
14 int main(void){
15     Ptr p = no(3,no(1,no(5,NULL)));
16     while(p != NULL){
17         printf("%d\n",p->item);
18         p = p->prox;
19     }
20     return 0;
21 }

```

```

C:\Users\cloud\OneDrive - Fat X + v
3
1
5

-----
Process exited after 0.04821 seconds with return value 0
Pressione qualquer tecla para continuar. . . |

```