Segunda Chamada - Algorit. e Prog. (10 pontos)

Prof. Fernando Esquírio Torres

Exercício 01 (10 pontos) – Empresa do Malvado Doofenshmirtz

Código simples

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

int main()
{
  char texto[200];
  int a=0,b=0,c=0,d=0,e=0,f=0,g=0,h=0,i=0,j=0,k=0,l=0,m=0,
  n=0,o=0,p=0,q=0,r=0,s=0,t=0,u=0,v=0,x=0,w=0,y=0,z=0,
  A=0,B=0,C=0,D=0,E=0,F=0,G=0,H=0,I=0,J=0,K=0,L=0,M=0,
  N=0,O=0,P=0,Q=0,R=0,S=0,T=0,U=0,V=0,X=0,W=0,Y=0,Z=0;
  int cont = 0;
  printf("Escreva seu texto:\n");
  gets(texto);

  while(texto[cont] != '\0'){
    if(texto[cont]=='a')
      a++;
    if(texto[cont]=='A')
      A++;
    if(texto[cont]=='b')
      b++;
    if(texto[cont]=='B')
      B++;
    if(texto[cont]=='c')
      c++;
    if(texto[cont]=='C')
      C++;
    if(texto[cont]=='d')
      d++;
    if(texto[cont]=='D')
      D++;
    if(texto[cont]=='e')
      e++;
    if(texto[cont]=='E')
      E++;
    if(texto[cont]=='f')
      f++;
    if(texto[cont]=='F')
      F++;
    if(texto[cont]=='g')
      g++;
    if(texto[cont]=='G')
      G++;
    if(texto[cont]=='h')
      h++;
    if(texto[cont]=='H')
      H++;
    if(texto[cont]=='i')
      i++;
    if(texto[cont]=='I')
      i++;
    if(texto[cont]=='j')
      j++;
    if(texto[cont]=='J')
      J++;
```

```
    if(texto[cont]=='k')
      k++;
    if(texto[cont]=='K')
      K++;
    if(texto[cont]=='l')
      l++;
    if(texto[cont]=='L')
      L++;
    if(texto[cont]=='m')
      m++;
    if(texto[cont]=='M')
      M++;
    if(texto[cont]=='n')
      n++;
    if(texto[cont]=='N')
      N++;
    if(texto[cont]=='o')
      o++;
    if(texto[cont]=='O')
      O++;
    if(texto[cont]=='p')
      p++;
    if(texto[cont]=='P')
      P++;
    if(texto[cont]=='q')
      q++;
    if(texto[cont]=='Q')
      Q++;
    if(texto[cont]=='r')
      r++;
    if(texto[cont]=='R')
      R++;
    if(texto[cont]=='s')
      s++;
    if(texto[cont]=='S')
      S++;
    if(texto[cont]=='t')
      t++;
    if(texto[cont]=='T')
      T ++;
    if(texto[cont]=='u')
      u++;
    if(texto[cont]=='U')
      U++;
    if(texto[cont]=='v')
      v++;
    if(texto[cont]=='V')
      V++;
    if(texto[cont]=='x')
      x++;
    if(texto[cont]=='X')
      X++;
    if(texto[cont]=='w')
      w++;
    if(texto[cont]=='W')
      W++;
    if(texto[cont]=='y')
      y++;
    if(texto[cont]=='Y')
      Y++;
    if(texto[cont]=='z')
      z++;
    if(texto[cont]=='Z')
      Z++;
    cont++;
  }
  printf("Ocorrencias de Letras Minusculas:\n");
```

```
  printf("\"a\": %d \t", a);
  printf("\"b\": %d \t", b);
  printf("\"c\": %d \t", c);
  printf("\"d\": %d \t", d);
  printf("\"e\": %d \t", e);
  printf("\"f\": %d \t", f);
  printf("\"g\": %d \t", g);
  printf("\"h\": %d \t", h);
  printf("\"i\": %d \t", i);
  printf("\"j\": %d \t", j);
  printf("\"k\": %d \t", k);
  printf("\"l\": %d \t", l);
  printf("\"m\": %d \t", m);
  printf("\"n\": %d \t", n);
  printf("\"o\": %d \t", o);
  printf("\"p\": %d \t", p);
  printf("\"q\": %d \t", q);
  printf("\"r\": %d \t", r);
  printf("\"s\": %d \t", s);
  printf("\"t\": %d \t", t);
  printf("\"u\": %d \t", u);
  printf("\"v\": %d \t", v);
  printf("\"w\": %d \t", w);
  printf("\"y\": %d \t", y);
  printf("\"x\": %d \t", x);
  printf("\"z\": %d \t", z);

  printf("Ocorrencias de Letras Minusculas:\n");
  printf("\"A\": %d \t", A);
  printf("\"B\": %d \t", B);
  printf("\"C\": %d \t", C);
  printf("\"D\": %d \t", D);
  printf("\"E\": %d \t", E);
  printf("\"F\": %d \t", F);
  printf("\"G\": %d \t", G);
  printf("\"H\": %d \t", H);
  printf("\"I\": %d \t", I);
  printf("\"J\": %d \t", J);
  printf("\"K\": %d \t", K);
  printf("\"L\": %d \t", L);
  printf("\"M\": %d \t", M);
  printf("\"N\": %d \t", N);
  printf("\"O\": %d \t", O);
  printf("\"P\": %d \t", P);
  printf("\"Q\": %d \t", Q);
  printf("\"R\": %d \t", R);
  printf("\"S\": %d \t", S);
  printf("\"T\": %d \t", T);
  printf("\"U\": %d \t", U);
  printf("\"V\": %d \t", V);
  printf("\"W\": %d \t", W);
  printf("\"Y\": %d \t", Y);
  printf("\"X\": %d \t", X);
  printf("\"Z\": %d \t", Z);

  return 0;
}
```

Código com todas as fuincionalidades

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

int main()
{
  char texto[200], parada = '1';
```

```
int a=0,b=0,c=0,d=0,e=0,f=0,g=0,h=0,i=0,j=0,k=0,l=0,m=0,
n=0,o=0,p=0,q=0,r=0,s=0,t=0,u=0,v=0,x=0,w=0,y=0,z=0;
int cont = 0, tam = 0;
printf("Escreva seu texto, digite # para parar:\n");;
gets(texto);
do{
  parada = fgetc(stdin);

  if(parada == '~'){
    texto[tam] = '\0';
    tam++;
  }
  else if (parada == 13){
    putchar('\n');
  }
  else{
    texto[tam] = parada;
    tam++;
  }
}while(parada != '#');

while(texto[cont] != '\0'){
  if(texto[cont]=='a' || texto[cont]=='A')
    a++;
  if(texto[cont]=='b' || texto[cont]=='B')
    b++;
  if(texto[cont]=='c' || texto[cont]=='C')
    c++;
  if(texto[cont]=='d' || texto[cont]=='D')
    d++;
  if(texto[cont]=='e' || texto[cont]=='E')
    e++;
  if(texto[cont]=='f' || texto[cont]=='F')
    f++;
  if(texto[cont]=='g' || texto[cont]=='G')
    g++;
  if(texto[cont]=='h' || texto[cont]=='H')
    h++;
  if(texto[cont]=='i' || texto[cont]=='I')
    i++;
  if(texto[cont]=='j' || texto[cont]=='J')
    j++;
  if(texto[cont]=='k' || texto[cont]=='K')
    k++;
  if(texto[cont]=='l' || texto[cont]=='L')
    l++;
  if(texto[cont]=='m' || texto[cont]=='M')
    m++;
  if(texto[cont]=='n' || texto[cont]=='N')
    n++;
  if(texto[cont]=='o' || texto[cont]=='O')
    o++;
  if(texto[cont]=='p' || texto[cont]=='P')
    p++;
  if(texto[cont]=='q' || texto[cont]=='Q')
    q++;
  if(texto[cont]=='r' || texto[cont]=='R')
    r++;
  if(texto[cont]=='s' || texto[cont]=='S')
    s++;
  if(texto[cont]=='t' || texto[cont]=='T')
    t++;
  if(texto[cont]=='u' || texto[cont]=='U')
    u++;
  if(texto[cont]=='v' || texto[cont]=='V')
    v++;
  if(texto[cont]=='x' || texto[cont]=='X')
```

```
      x++;
    if(texto[cont]=='w' || texto[cont]=='W')
      w++;
    if(texto[cont]=='y' || texto[cont]=='Y')
      y++;
    if(texto[cont]=='z' || texto[cont]=='Z')
      z++;
    cont++;
  }
  printf("Ocorrencias de Letras:\n");
  printf("\"a\": %d \t", a);
  printf("\"b\": %d \t", b);
  printf("\"c\": %d \t", c);
  printf("\"d\": %d \t", d);
  printf("\"e\": %d \t", e);
  printf("\"f\": %d \t", f);
  printf("\"g\": %d \t", g);
  printf("\"h\": %d \t", h);
  printf("\"i\": %d \t", i);
  printf("\"j\": %d \t", j);
  printf("\"k\": %d \t", k);
  printf("\"l\": %d \t", l);
  printf("\"m\": %d \t", m);
  printf("\"n\": %d \t", n);
  printf("\"o\": %d \t", o);
  printf("\"p\": %d \t", p);
  printf("\"q\": %d \t", q);
  printf("\"r\": %d \t", r);
  printf("\"s\": %d \t", s);
  printf("\"t\": %d \t", t);
  printf("\"u\": %d \t", u);
  printf("\"v\": %d \t", v);
  printf("\"w\": %d \t", w);
  printf("\"y\": %d \t", y);
  printf("\"x\": %d \t", x);
  printf("\"z\": %d \t", z);

  return 0;
}
```