

## Exercício 1

```
Ex1.c
83 }
84
85 void exibed(Dic d) {
86     for(int i=0; i<d->tam; i++) {
87         printf("%d: ", i);
88         exibem(d->vet[i]);
89     }
90 }
91
92 void destroim(Map *M) {
93     while (*M) {
94         Map temp = *M;
95         *M = (*M)->prox;
96         free(temp);
97     }
98 }
99
100 void destroid(Dic *d) {
101     for(int i=0; i<(*d)->tam; i++)
102         destroim(&(*d)->vet[i]);
103     free(*d);
104     *d = NULL;
105 }
106
107 int main(void) {
108     Dic D = dic(5);
109     insd(59, "Bia", D);
110     insd(48, "Eva", D);
111     insd(25, "Ivo", D);
112     insd(17, "Ana", D);
113     insd(83, "Leo", D);
114     exibed(D);
115     return 0;
116 }
117 }
```

```
C:\Users\P08012631\Desktop\
0: [[25,Ivo]]
1: []
2: [[17,Ana]]
3: [[48,Eva),(83,Leo]]
4: [[59,Bia]]

-----
Process exited after 1.328 seconds with return value 0
Pressione qualquer tecla para continuar. . .
```

## Exercício 2

```
Ex1.c Ex2.c
88     exibem(d->vet[i]);
89 }
90 }
91
92 void destroim(Map *M) {
93     while (*M) {
94         Map temp = *M;
95         *M = (*M)->prox;
96         free(temp);
97     }
98 }
99
100 void destroid(Dic *d) {
101     for(int i=0; i<(*d)->tam; i++)
102         destroim(&(*d)->vet[i]);
103     free(*d);
104     *d = NULL;
105 }
106
107 int main(void) {
108     Dic D = dic(5);
109     insd(59, "Bia", D);
110     insd(48, "Eva", D);
111     insd(25, "Ivo", D);
112     insd(17, "Ana", D);
113     insd(83, "Leo", D);
114     printf("Dicionario com valores incluidos:\n");
115     exibed(D);
116
117     remd(48, D);
118     remd(25, D);
119     remd(17, D);
120     printf("\n\nDicionario com valores removido:\n");
121     public int cdecl printf (const char * restrict, format, ...);
```

```
C:\Users\P08012631\Desktop\
Dicionario com valores incluidos:
0: [[25,Ivo]]
1: []
2: [[17,Ana]]
3: [[48,Eva),(83,Leo]]
4: [[59,Bia]]

Dicionario com valores removido:
0: []
1: []
2: []
3: [[83,Leo]]
4: [[59,Bia]]

-----
Process exited after 0.8075 seconds with return value 0
Pressione qualquer tecla para continuar. . .
```

### Exercício 3

```
Ex1.c Ex2.c Ex3.c
89
90 void exibed(Dic d) {
91     for (int i = 0; i < d->tam; i++) {
92         printf("%d: ", i);
93         exibem(d->vet[i]);
94     }
95 }
96
97 void destroim(Map *M) {
98     while (*M) {
99         Map temp = *M;
100         *M = (*M)->prox;
101         free(temp);
102     }
103 }
104
105 void destroid(Dic *d) {
106     for (int i = 0; i < (*d)->tam; i++)
107         destroim(&(*d)->vet[i]);
108     free((*d)->vet);
109     free(*d);
110     *d = NULL;
111 }
112
113 int main(void) {
114     Dic D = dic(3);
115     insd("bat", "morcego", D);
116     insd("pig", "porco", D);
117     insd("cat", "gato", D);
118     insd("dog", "cachorro", D);
119     insd("cow", "vaca", D);
120     exibed(D);
121     destroid(&D);
122     return 0;
123 }
```

```
C:\Users\P08012631\Desktop\ x + v
0: [(cow,vaca)]
1: [(bat,morcego),(dog,cachorro),(pig,porco)]
2: [(cat,gato)]

-----
Process exited after 1.657 seconds with return value 0
Pressione qualquer tecla para continuar. . .
```

### Exercício 4

```
Ex1.c Ex2.c Ex3.c Ex4.c
97 void destroim(Map *M) {
98     while (*M) {
99         Map temp = *M;
100         *M = (*M)->prox;
101         free(temp);
102     }
103 }
104
105 void destroid(Dic *d) {
106     for (int i = 0; i < (*d)->tam; i++)
107         destroim(&(*d)->vet[i]);
108     free((*d)->vet);
109     free(*d);
110     *d = NULL;
111 }
112
113 int main(void) {
114     Dic D = dic(3);
115     insd("bat", "morcego", D);
116     insd("pig", "porco", D);
117     insd("cat", "gato", D);
118     insd("dog", "cachorro", D);
119     insd("cow", "vaca", D);
120     exibed(D);
121
122     remd("cat", D);
123     remd("bat", D);
124     remd("cow", D);
125     // 1/4 void remd (Chave c, Dic d) {
126     exibed(D);
127
128     destroid(&D);
129     return 0;
130 }
131 }
```

```
C:\Users\P08012631\Desktop\ x + v
0: [(cow,vaca)]
1: [(bat,morcego),(dog,cachorro),(pig,porco)]
2: [(cat,gato)]

Dicionario com valores removido:
0: []
1: [(dog,cachorro),(pig,porco)]
2: []

-----
Process exited after 1.513 seconds with return value 0
Pressione qualquer tecla para continuar. . . |
```