

Análise de algoritmos – Coloração de vértices

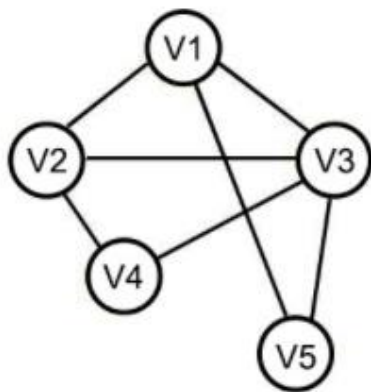
Vinnicius Pereira da Silva – 11821BCC046

Victor Borges Zuccolotto – 11811BCC034

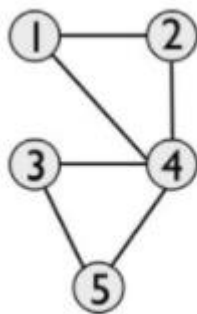
Pedro Henrique da Silva Oliveira – 11811BCC040

a) Adotamos a linguagem C, pois todos os integrantes do grupo tem um prévio conhecimento da mesma.

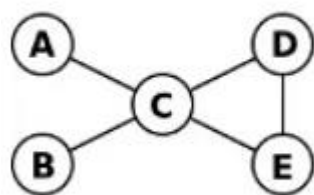
b)



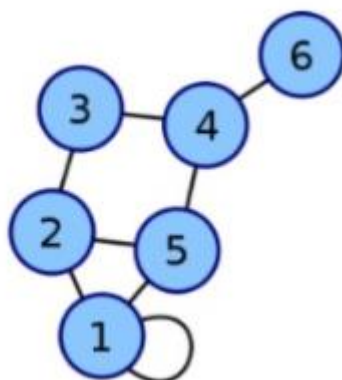
	V1	V2	V3	V4	V5
V1	0	1	1	0	1
V2	1	0	1	1	0
V3	1	1	0	1	1
V4	0	1	1	0	0
V5	1	0	1	0	0



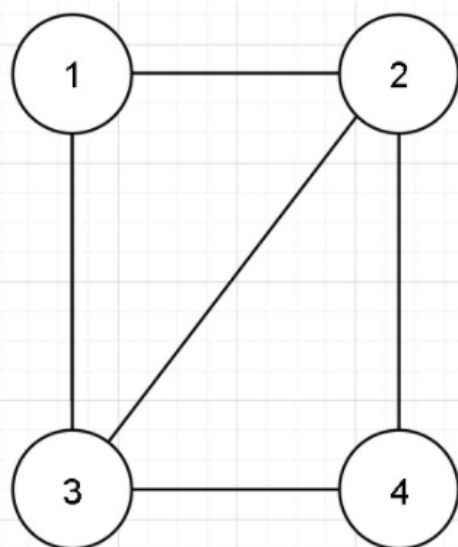
-	1	2	3	4	5
1	1	1	0	1	0
2	1	1	0	1	0
3	0	0	1	1	1
4	1	1	0	1	1
5	0	0	1	1	1



	A	B	C	D	E
A	0	0	1	0	0
B	0	0	1	0	0
C	1	1	0	1	1
D	0	0	1	0	1
E	0	0	1	1	0



$$A = \begin{bmatrix} 1 & 1 & 0 & 0 & 1 & 0 \\ 1 & 0 & 1 & 0 & 1 & 0 \\ 0 & 1 & 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 1 \\ 1 & 1 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 \end{bmatrix}$$



$\{ 0, 1, 1, 1 \}$
 $\{ 1, 0, 1, 0 \}$
 $\{ 1, 1, 0, 1 \}$
 $\{ 1, 0, 1, 0 \}$

bool graph[V][V] = {

c)

Matriz inserida:

0 1 1 0 1

1 0 1 1 0

1 1 0 1 1

0 1 1 0 0

1 0 1 0 0

Grafo com as cores

1 2 3 1 2

Grafo com as cores

1 3 2 1 3

Grafo com as cores

2 1 3 2 1

Grafo com as cores

2 3 1 2 3

Grafo com as cores

3 1 2 3 1

Grafo com as cores

3 2 1 3 2

**0 tempo usado para a execucao foi de 0.000058: Program
ended with exit code: 0**

Matriz inserida:

1 1 0 1 0

1 1 0 1 0

0 0 1 1 1

1 1 0 1 1

0 0 1 1 1

Grafo com as cores

1 2 1 3 2

Grafo com as cores

1 2 2 3 1

Grafo com as cores

1 2 3 3 1

Grafo com as cores

1 2 3 3 2

Grafo com as cores

1 3 1 2 3

Grafo com as cores

1 3 2 2 1

Grafo com as cores

1 3 2 2 3

Grafo com as cores

1 3 3 2 1

Grafo com as cores

2 1 1 3 2

Grafo com as cores

2 1 2 3 1

Grafo com as cores

2 1 3 3 1

Grafo com as cores

2 1 3 3 2

Grafo com as cores

2 3 1 1 2

Grafo com as cores

2 3 1 1 3

Grafo com as cores

2 3 2 1 3

Grafo com as cores

2 3 3 1 2

Grafo com as cores

3 1 1 2 3

Grafo com as cores

3 1 2 2 1

Grafo com as cores

3 1 2 2 3

Grafo com as cores

3 1 3 2 1

Grafo com as cores

3 2 1 1 2

Grafo com as cores

3 2 1 1 3

Grafo com as cores

3 2 2 1 3

Grafo com as cores

3 2 3 1 2

0 tempo usado para a execucao foi de 0.000201: Program ended with exit code: 0|

Matriz inserida:

```
0 0 1 0 0
0 0 1 0 0
1 1 0 1 1
0 0 1 0 1
0 0 1 1 0
```

Grafo com as cores

```
1 1 2 1 3
```

Grafo com as cores

```
1 1 2 3 1
```

Grafo com as cores

```
1 1 3 1 2
```

Grafo com as cores

```
1 1 3 2 1
```

Grafo com as cores

```
1 2 3 1 2
```

Grafo com as cores

```
1 2 3 2 1
```

Grafo com as cores

```
1 3 2 1 3
```

Grafo com as cores

```
1 3 2 3 1
```

Grafo com as cores

```
2 1 3 1 2
```

Grafo com as cores

```
2 1 3 2 1
```

Grafo com as cores

```
2 2 1 2 3
```

Grafo com as cores

```
2 2 1 3 2
```

Grafo com as cores

```
2 2 3 1 2
```

Grafo com as cores

```
2 2 3 2 1
```

Grafo com as cores

```
2 3 1 2 3
```

Grafo com as cores

```
2 3 1 3 2
```

Grafo com as cores

```
3 1 2 1 3
```

Grafo com as cores

```
3 1 2 3 1
```

Grafo com as cores

```
3 2 1 2 3
```

Grafo com as cores

```
3 2 1 3 2
```

Grafo com as cores

```
3 3 1 2 3
```

Grafo com as cores

```
3 3 1 3 2
```

Grafo com as cores

```
3 3 2 1 3
```

Grafo com as cores

```
3 3 2 3 1
```

0 tempo usado para a execucao foi de 0.000197: Program ended with exit code: 0

```
Matriz inserida:
1 1 0 0 1 0
1 0 1 0 1 0
0 1 0 1 0 0
0 0 1 0 1 1
1 1 0 1 0 0
0 0 0 1 0 0
Grafo com as cores
1 2 1 2 3 1
Grafo com as cores
1 2 1 2 3 3
Grafo com as cores
1 2 3 1 3 2
Grafo com as cores
1 2 3 1 3 3
Grafo com as cores
1 2 3 2 3 1
Grafo com as cores
1 2 3 2 3 3
Grafo com as cores
1 3 1 3 2 1
Grafo com as cores
1 3 1 3 2 2
Grafo com as cores
1 3 2 1 2 2
Grafo com as cores
1 3 2 1 2 3
Grafo com as cores
1 3 2 3 2 1
Grafo com as cores
1 3 2 3 2 2
Grafo com as cores
2 1 2 1 3 2
Grafo com as cores
2 1 2 1 3 3
Grafo com as cores
2 1 3 1 3 2
Grafo com as cores
2 1 3 1 3 3
Grafo com as cores
2 1 3 2 3 1
Grafo com as cores
2 1 3 2 3 3
Grafo com as cores
2 3 1 2 1 1
Grafo com as cores
2 3 1 2 1 3
Grafo com as cores
2 3 1 3 1 1
Grafo com as cores
2 3 1 3 1 2
Grafo com as cores
2 3 2 3 1 1
Grafo com as cores
2 3 2 3 1 2
Grafo com as cores
3 1 2 1 2 2
Grafo com as cores
3 1 2 1 2 3
Grafo com as cores
3 1 2 3 2 1
Grafo com as cores
3 1 2 3 2 2
Grafo com as cores
3 1 3 1 2 2
Grafo com as cores
3 1 3 1 2 3
Grafo com as cores
3 2 1 2 1 1
Grafo com as cores
3 2 1 2 1 3
Grafo com as cores
3 2 1 3 1 1
Grafo com as cores
3 2 1 3 1 2
Grafo com as cores
3 2 3 2 1 1
Grafo com as cores
3 2 3 2 1 3
0 tempo usado para a execucao foi de 0.000318: Program ended with exit code: 0
```

Matriz inserida:

0 1 1 1

1 0 1 0

1 1 0 1

1 0 1 0

Grafo com as cores

1 2 3 2

Grafo com as cores

1 3 2 3

Grafo com as cores

2 1 3 1

Grafo com as cores

2 3 1 3

Grafo com as cores

3 1 2 1

Grafo com as cores

3 2 1 2

**0 tempo usado para a execucao foi de 0.000040: Program
ended with exit code: 0**

All Output ↕

Filter

