

Aluno: ANA CAROLINA VEDDY ALVES

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

(0.0, 2.45), (0.5, 1.28), (1.0, 1.9), (1.5, 1.84), (2.0, 2.98), (2.5, 1.3), (3.0, 2.13)

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 2.4500000000000000

\_\_\_\_\_ 1.3000000000000000

\_\_\_\_\_ 2.9800000000000000

\_\_\_\_\_ 1.2800000000000000

\_\_\_\_\_ 1.8400000000000000

\_\_\_\_\_ 1.9000000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -0.745794871794871

\_\_\_\_\_ 0.431128205128205

\_\_\_\_\_ -1.955487179487180

\_\_\_\_\_ -0.063179487179488

\_\_\_\_\_ 1.698666666666667

\_\_\_\_\_ -3.478410256410257

 $c_0$  a  $c_5$ 

\_\_\_\_\_ 8.376923076923077

\_\_\_\_\_ -13.265846153846155

\_\_\_\_\_ -5.841846153846153

\_\_\_\_\_ 10.846461538461538

\_\_\_\_\_ 6.830461538461538

\_\_\_\_\_ 0.0000000000000000

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 9.479179487179486

\_\_\_\_\_ 16.074871794871797

\_\_\_\_\_ 4.553641025641025

\_\_\_\_\_ -14.428512820512822

\_\_\_\_\_ -7.230974358974358

\_\_\_\_\_ -8.448205128205126

Aluno: ANDERSON VAILATI RITZMANN

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 2.87), (0.5, 2.47), (1.0, 1.71), (1.5, 2.88), (2.0, 2.55), (2.5, 1.37), (3.0, 2.23)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 2.5500000000000000

\_\_\_\_\_ 2.4700000000000000

\_\_\_\_\_ 1.3700000000000000

\_\_\_\_\_ 2.8700000000000000

\_\_\_\_\_ 2.8800000000000000

\_\_\_\_\_ 1.7100000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -1.827589743589744

\_\_\_\_\_ 0.636564102564102

\_\_\_\_\_ -2.561897435897436

\_\_\_\_\_ -0.286205128205128

\_\_\_\_\_ 1.741333333333333

\_\_\_\_\_ -0.553743589743589

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -3.082769230769232

\_\_\_\_\_ -5.801538461538462

\_\_\_\_\_ 6.821230769230768

\_\_\_\_\_ -2.804923076923075

\_\_\_\_\_ 8.011076923076924

\_\_\_\_\_ 0.0000000000000000

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 1.997743589743592

\_\_\_\_\_ -9.208410256410259

\_\_\_\_\_ -4.547487179487178

\_\_\_\_\_ 6.417435897435895

\_\_\_\_\_ -2.055179487179488

\_\_\_\_\_ 7.395897435897438

Aluno: ANDRÉ LUÍS PERIPOLLI

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 2.28), (0.5, 2.2), (1.0, 1.51), (1.5, 1.37), (2.0, 1.23), (2.5, 1.67), (3.0, 2.41)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.5100000000000000

\_\_\_\_\_ 1.6700000000000000

\_\_\_\_\_ 2.2000000000000000

\_\_\_\_\_ 1.3700000000000000

\_\_\_\_\_ 2.2800000000000000

\_\_\_\_\_ 1.2300000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 0.171974358974359

\_\_\_\_\_ 0.251051282051283

\_\_\_\_\_ -0.942641025641026

\_\_\_\_\_ 1.339435897435898

\_\_\_\_\_ -0.227333333333333

\_\_\_\_\_ -0.982102564102564

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -1.114615384615386

\_\_\_\_\_ -2.466307692307694

\_\_\_\_\_ 1.913230769230770

\_\_\_\_\_ 2.545230769230770

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ 0.421692307692308

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 2.018564102564103

\_\_\_\_\_ -0.281128205128206

\_\_\_\_\_ -0.994358974358974

\_\_\_\_\_ -2.439897435897437

\_\_\_\_\_ 3.341025641025643

\_\_\_\_\_ -1.644205128205129

Aluno: BRUNO HENRIQUE COSTA SEIXAS

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.45), (0.5, 1.12), (1.0, 1.69), (1.5, 1.11), (2.0, 2.12), (2.5, 2.57), (3.0, 2.2)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 2.5700000000000000

\_\_\_\_\_ 1.4500000000000000

\_\_\_\_\_ 1.6900000000000000

\_\_\_\_\_ 2.1200000000000000

\_\_\_\_\_ 1.1100000000000000

\_\_\_\_\_ 1.1200000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -0.172461538461539

\_\_\_\_\_ 2.193615384615384

\_\_\_\_\_ 0.764461538461538

\_\_\_\_\_ -0.245615384615384

\_\_\_\_\_ 0.1580000000000001

\_\_\_\_\_ -1.372230769230769

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -1.702615384615382

\_\_\_\_\_ -6.293538461538461

\_\_\_\_\_ -3.029538461538463

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ 4.273384615384614

\_\_\_\_\_ 7.100769230769230

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 1.135076923076922

\_\_\_\_\_ 2.848923076923076

\_\_\_\_\_ -6.753538461538461

\_\_\_\_\_ 8.929538461538462

\_\_\_\_\_ 0.884615384615387

\_\_\_\_\_ -7.044615384615383

Aluno: DEVAIR DENER DAROLT

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.51), (0.5, 1.51), (1.0, 2.31), (1.5, 2.53), (2.0, 1.71), (2.5, 1.88), (3.0, 1.69)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.8800000000000000

\_\_\_\_\_ 1.5100000000000000

\_\_\_\_\_ 1.5100000000000000

\_\_\_\_\_ 2.3100000000000000

\_\_\_\_\_ 1.7100000000000000

\_\_\_\_\_ 2.5300000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 0.921846153846154

\_\_\_\_\_ -0.789538461538461

\_\_\_\_\_ 1.573538461538461

\_\_\_\_\_ -0.460923076923077

\_\_\_\_\_ 0.354153846153846

\_\_\_\_\_ -1.0960000000000000

 $c_0$  a  $c_5$ 

\_\_\_\_\_ 2.765538461538462

\_\_\_\_\_ -3.876923076923075

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -2.202461538461538

\_\_\_\_\_ -1.462153846153848

\_\_\_\_\_ 4.489846153846152

 $d_0$  a  $d_5$ 

\_\_\_\_\_ -1.609846153846151

\_\_\_\_\_ -2.818461538461540

\_\_\_\_\_ 1.843692307692308

\_\_\_\_\_ 5.577846153846150

\_\_\_\_\_ -4.461538461538460

\_\_\_\_\_ 1.468307692307692

Aluno: ENDREW RAFAEL TREPTOW HANG

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.8), (0.5, 1.96), (1.0, 1.5), (1.5, 1.05), (2.0, 2.95), (2.5, 2.4), (3.0, 1.07)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.9600000000000000

\_\_\_\_\_ 2.4000000000000000

\_\_\_\_\_ 2.9500000000000000

\_\_\_\_\_ 1.5000000000000000

\_\_\_\_\_ 1.0500000000000000

\_\_\_\_\_ 1.8000000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 2.0953333333333334

\_\_\_\_\_ 0.540179487179487

\_\_\_\_\_ -1.858743589743590

\_\_\_\_\_ -2.704974358974359

\_\_\_\_\_ -0.120358974358974

\_\_\_\_\_ 2.177410256410256

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -1.321076923076923

\_\_\_\_\_ 0.134923076923079

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -2.155692307692307

\_\_\_\_\_ -9.899692307692309

\_\_\_\_\_ 10.063846153846153

 $d_0$  a  $d_5$ 

\_\_\_\_\_ -0.880717948717949

\_\_\_\_\_ 8.146358974358973

\_\_\_\_\_ -0.089948717948719

\_\_\_\_\_ -13.309025641025642

\_\_\_\_\_ -0.556410256410256

\_\_\_\_\_ 6.689743589743592

Aluno: FILIPE DA SILVA DE OLIVEIRA

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

(0.0, 2.75), (0.5, 1.5), (1.0, 1.56), (1.5, 2.5), (2.0, 1.44), (2.5, 2.84), (3.0, 2.05)

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.5600000000000000

\_\_\_\_\_ 2.7500000000000000

\_\_\_\_\_ 2.8400000000000000

\_\_\_\_\_ 2.5000000000000000

\_\_\_\_\_ 1.4400000000000000

\_\_\_\_\_ 1.5000000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 2.084717948717949

\_\_\_\_\_ -2.967897435897436

\_\_\_\_\_ 0.293948717948718

\_\_\_\_\_ 1.638871794871795

\_\_\_\_\_ -0.7746666666666666

\_\_\_\_\_ -1.564205128205128

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -10.209230769230770

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ 4.490461538461537

\_\_\_\_\_ 12.346461538461536

\_\_\_\_\_ 2.807384615384616

\_\_\_\_\_ -9.656615384615383

 $d_0$  a  $d_5$ 

\_\_\_\_\_ -14.668717948717946

\_\_\_\_\_ 1.871589743589744

\_\_\_\_\_ 15.037128205128203

\_\_\_\_\_ -9.799794871794871

\_\_\_\_\_ 1.122051282051281

\_\_\_\_\_ 6.437743589743589

Aluno: FREDERICO MINUZZI

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.78), (0.5, 1.34), (1.0, 2.46), (1.5, 1.16), (2.0, 2.13), (2.5, 2.66), (3.0, 2.15)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.7800000000000000

\_\_\_\_\_ 2.6600000000000000

\_\_\_\_\_ 2.1300000000000000

\_\_\_\_\_ 1.3400000000000000

\_\_\_\_\_ 1.1600000000000000

\_\_\_\_\_ 2.4600000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 2.573820512820514

\_\_\_\_\_ -1.0313333333333333

\_\_\_\_\_ -2.152641025641025

\_\_\_\_\_ 1.665282051282051

\_\_\_\_\_ -0.428487179487179

\_\_\_\_\_ -0.263948717948718

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -3.407384615384614

\_\_\_\_\_ -2.268153846153848

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ 10.617692307692307

\_\_\_\_\_ 7.635846153846154

\_\_\_\_\_ -11.823384615384615

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 1.512102564102565

\_\_\_\_\_ 14.960717948717948

\_\_\_\_\_ -9.350051282051281

\_\_\_\_\_ 0.759487179487177

\_\_\_\_\_ 5.090564102564103

\_\_\_\_\_ -12.972820512820512



Aluno: GUILHERME ARAÚJO LIRA DE MENEZES

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.4), (0.5, 2.08), (1.0, 2.62), (1.5, 1.97), (2.0, 2.31), (2.5, 2.5), (3.0, 1.88)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.4000000000000000

\_\_\_\_\_ 2.3100000000000000

\_\_\_\_\_ 2.6200000000000000

\_\_\_\_\_ 1.9700000000000000

\_\_\_\_\_ 2.0800000000000000

\_\_\_\_\_ 2.5000000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 1.626769230769231

\_\_\_\_\_ 1.081692307692308

\_\_\_\_\_ 1.226615384615385

\_\_\_\_\_ -0.413692307692308

\_\_\_\_\_ -0.6320000000000000

\_\_\_\_\_ -0.514769230769231

 $c_0$  a  $c_5$ 

\_\_\_\_\_ 0.800307692307692

\_\_\_\_\_ -1.017230769230770

\_\_\_\_\_ -2.175692307692308

\_\_\_\_\_ 4.444615384615386

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -4.881230769230770

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 0.533538461538461

\_\_\_\_\_ -0.772307692307692

\_\_\_\_\_ 1.450461538461538

\_\_\_\_\_ -3.787692307692308

\_\_\_\_\_ 6.217230769230770

\_\_\_\_\_ -3.641230769230770

Aluno: GUILHERME LAFUENTE GONÇALVES

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 2.24), (0.5, 2.33), (1.0, 1.82), (1.5, 2.92), (2.0, 2.99), (2.5, 2.5), (3.0, 2.51)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.8200000000000000

\_\_\_\_\_ 2.3300000000000000

\_\_\_\_\_ 2.5000000000000000

\_\_\_\_\_ 2.2400000000000000

\_\_\_\_\_ 2.9900000000000000

\_\_\_\_\_ 2.9200000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -0.561384615384616

\_\_\_\_\_ 1.8220000000000001

\_\_\_\_\_ 0.677153846153846

\_\_\_\_\_ -0.945153846153846

\_\_\_\_\_ 0.765307692307692

\_\_\_\_\_ -0.990615384615385

 $c_0$  a  $c_5$ 

\_\_\_\_\_ 1.744153846153847

\_\_\_\_\_ 6.847384615384615

\_\_\_\_\_ -0.976615384615387

\_\_\_\_\_ -3.511846153846153

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -4.557692307692307

 $d_0$  a  $d_5$ 

\_\_\_\_\_ -2.341230769230769

\_\_\_\_\_ 6.906153846153845

\_\_\_\_\_ 1.813846153846156

\_\_\_\_\_ -7.603384615384615

\_\_\_\_\_ 2.387384615384613

\_\_\_\_\_ -1.162769230769231

Aluno: HENRIQUE WIPPEL PARUCKER DA SILVA

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.54), (0.5, 2.46), (1.0, 2.05), (1.5, 2.24), (2.0, 1.1), (2.5, 1.67), (3.0, 2.51)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.5400000000000000

\_\_\_\_\_ 2.0500000000000000

\_\_\_\_\_ 2.2400000000000000

\_\_\_\_\_ 1.6700000000000000

\_\_\_\_\_ 1.1000000000000000

\_\_\_\_\_ 2.4600000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 0.106205128205128

\_\_\_\_\_ -1.1393333333333333

\_\_\_\_\_ -0.071717948717948

\_\_\_\_\_ 2.003128205128205

\_\_\_\_\_ -1.070948717948718

\_\_\_\_\_ 2.706897435897436

 $c_0$  a  $c_5$ 

\_\_\_\_\_ 4.845538461538464

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ 7.117538461538462

\_\_\_\_\_ -0.969384615384616

\_\_\_\_\_ -6.980769230769234

\_\_\_\_\_ -5.201384615384616

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 6.697948717948719

\_\_\_\_\_ -5.391282051282052

\_\_\_\_\_ 9.398871794871797

\_\_\_\_\_ 0.646256410256410

\_\_\_\_\_ -7.884205128205132

\_\_\_\_\_ -3.467589743589744

Aluno: JOÃO GUILHERME PELIZZA

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 2.5), (0.5, 2.07), (1.0, 1.21), (1.5, 1.43), (2.0, 2.34), (2.5, 1.88), (3.0, 1.33)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.2100000000000000

\_\_\_\_\_ 2.5000000000000000

\_\_\_\_\_ 1.8800000000000000

\_\_\_\_\_ 2.3400000000000000

\_\_\_\_\_ 1.4300000000000000

\_\_\_\_\_ 2.0700000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -1.425692307692307

\_\_\_\_\_ -0.514846153846154

\_\_\_\_\_ 1.8060000000000000

\_\_\_\_\_ -1.023923076923076

\_\_\_\_\_ 0.579923076923077

\_\_\_\_\_ -1.550307692307692

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -2.070923076923076

\_\_\_\_\_ 3.123692307692307

\_\_\_\_\_ 2.536153846153845

\_\_\_\_\_ -4.988307692307691

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ 0.977076923076924

 $d_0$  a  $d_5$ 

\_\_\_\_\_ -1.380615384615384

\_\_\_\_\_ 3.976923076923077

\_\_\_\_\_ -5.016307692307691

\_\_\_\_\_ -0.651384615384616

\_\_\_\_\_ -0.391692307692308

\_\_\_\_\_ 3.463076923076922

Aluno: JOSÉ EDUARDO BRANDÃO

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 2.63), (0.5, 2.59), (1.0, 1.81), (1.5, 2.55), (2.0, 2.61), (2.5, 2.24), (3.0, 1.36)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 2.6300000000000000

\_\_\_\_\_ 2.6100000000000000

\_\_\_\_\_ 2.2400000000000000

\_\_\_\_\_ 2.5900000000000000

\_\_\_\_\_ 2.5500000000000000

\_\_\_\_\_ 1.8100000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -0.486435897435897

\_\_\_\_\_ 0.557871794871795

\_\_\_\_\_ 1.3353333333333333

\_\_\_\_\_ -1.355743589743589

\_\_\_\_\_ -1.249589743589743

\_\_\_\_\_ -0.054897435897436

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -3.648461538461537

\_\_\_\_\_ -1.531230769230771

\_\_\_\_\_ 6.428923076923074

\_\_\_\_\_ -3.827230769230768

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ 0.004923076923078

 $d_0$  a  $d_5$ 

\_\_\_\_\_ -6.718256410256408

\_\_\_\_\_ 2.435589743589743

\_\_\_\_\_ 1.020820512820514

\_\_\_\_\_ -1.024102564102566

\_\_\_\_\_ 6.837435897435896

\_\_\_\_\_ -2.551487179487179

Aluno: LEONARDO DE CASTRO

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.68), (0.5, 2.77), (1.0, 1.17), (1.5, 2.51), (2.0, 2.96), (2.5, 2.64), (3.0, 1.38)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 2.7700000000000000

\_\_\_\_\_ 1.6800000000000000

\_\_\_\_\_ 2.6400000000000000

\_\_\_\_\_ 2.9600000000000000

\_\_\_\_\_ 1.1700000000000000

\_\_\_\_\_ 2.5100000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -0.712769230769231

\_\_\_\_\_ 4.072461538461539

\_\_\_\_\_ -1.604923076923077

\_\_\_\_\_ 2.8960000000000000

\_\_\_\_\_ -1.591076923076923

\_\_\_\_\_ -0.131230769230769

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -11.354769230769231

\_\_\_\_\_ 13.139076923076923

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -5.921538461538460

\_\_\_\_\_ -2.786769230769232

\_\_\_\_\_ -0.132923076923077

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 16.329230769230769

\_\_\_\_\_ 1.857846153846155

\_\_\_\_\_ -1.769230769230770

\_\_\_\_\_ 3.859076923076922

\_\_\_\_\_ -7.569846153846154

\_\_\_\_\_ -12.707076923076920

Aluno: LEONARDO SILVA VASQUEZ RIBEIRO

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 2.88), (0.5, 1.59), (1.0, 1.79), (1.5, 2.1), (2.0, 2.46), (2.5, 2.25), (3.0, 1.36)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.7900000000000000

\_\_\_\_\_ 2.1000000000000000

\_\_\_\_\_ 2.8800000000000000

\_\_\_\_\_ 2.4600000000000000

\_\_\_\_\_ 1.5900000000000000

\_\_\_\_\_ 2.2500000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 0.838974358974359

\_\_\_\_\_ -1.224102564102564

\_\_\_\_\_ -1.002564102564102

\_\_\_\_\_ 0.354358974358974

\_\_\_\_\_ -3.368717948717948

\_\_\_\_\_ 0.706666666666667

 $c_0$  a  $c_5$ 

\_\_\_\_\_ 4.732307692307691

\_\_\_\_\_ -1.489230769230768

\_\_\_\_\_ -1.667692307692308

\_\_\_\_\_ 0.784615384615384

\_\_\_\_\_ -1.049230769230768

\_\_\_\_\_ 0.0000000000000000

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 1.222564102564101

\_\_\_\_\_ -3.854358974358973

\_\_\_\_\_ 3.154871794871794

\_\_\_\_\_ -1.515897435897435

\_\_\_\_\_ -0.118974358974360

\_\_\_\_\_ 1.111794871794872

Aluno: LUCAS MATHEUS CAMILO VEIGA

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.25), (0.5, 2.61), (1.0, 1.24), (1.5, 2.18), (2.0, 2.08), (2.5, 1.2), (3.0, 1.05)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.2000000000000000

\_\_\_\_\_ 2.6100000000000000

\_\_\_\_\_ 1.2500000000000000

\_\_\_\_\_ 2.0800000000000000

\_\_\_\_\_ 1.2400000000000000

\_\_\_\_\_ 2.1800000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -1.652410256410257

\_\_\_\_\_ 1.8946666666666666

\_\_\_\_\_ -1.165025641025641

\_\_\_\_\_ -0.929641025641025

\_\_\_\_\_ 4.544820512820513

\_\_\_\_\_ -0.886256410256410

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -10.948923076923077

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -5.473846153846154

\_\_\_\_\_ 2.595076923076924

\_\_\_\_\_ 11.035692307692306

\_\_\_\_\_ -1.620307692307693

 $d_0$  a  $d_5$ 

\_\_\_\_\_ -1.730051282051283

\_\_\_\_\_ -11.006358974358974

\_\_\_\_\_ 2.569025641025640

\_\_\_\_\_ 2.810256410256411

\_\_\_\_\_ -7.299282051282051

\_\_\_\_\_ 14.656410256410254



Aluno: LUCAS MENEGHELLI PEREIRA

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

(0.0, 1.08), (0.5, 2.75), (1.0, 2.45), (1.5, 1.55), (2.0, 1.57), (2.5, 2.02), (3.0, 1.07)

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.5700000000000000

\_\_\_\_\_ 1.5500000000000000

\_\_\_\_\_ 2.0200000000000000

\_\_\_\_\_ 2.7500000000000000

\_\_\_\_\_ 1.0800000000000000

\_\_\_\_\_ 2.4500000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -1.884743589743590

\_\_\_\_\_ 1.071410256410256

\_\_\_\_\_ -1.116666666666667

\_\_\_\_\_ 1.455641025641026

\_\_\_\_\_ 4.282179487179487

\_\_\_\_\_ -0.348974358974359

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -4.653076923076923

\_\_\_\_\_ 2.563846153846154

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -5.653076923076922

\_\_\_\_\_ 1.812307692307692

\_\_\_\_\_ -1.027692307692309

 $d_0$  a  $d_5$ 

\_\_\_\_\_ -3.768717948717948

\_\_\_\_\_ 2.394358974358976

\_\_\_\_\_ 3.083589743589742

\_\_\_\_\_ 3.102051282051282

\_\_\_\_\_ -0.501025641025642

\_\_\_\_\_ -4.310256410256410

Aluno: MARCOS VALDECIR CAVALHEIRO JUNIOR

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

(0.0, 2.73), (0.5, 2.6), (1.0, 1.1), (1.5, 1.17), (2.0, 2.85), (2.5, 1.81), (3.0, 1.33)

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 2.7300000000000000

\_\_\_\_\_ 1.1700000000000000

\_\_\_\_\_ 1.8100000000000000

\_\_\_\_\_ 2.8500000000000000

\_\_\_\_\_ 2.6000000000000000

\_\_\_\_\_ 1.1000000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -2.425948717948718

\_\_\_\_\_ 3.0226666666666666

\_\_\_\_\_ -1.996717948717948

\_\_\_\_\_ -2.401487179487179

\_\_\_\_\_ 0.810820512820512

\_\_\_\_\_ 0.608358974358974

 $c_0$  a  $c_5$ 

\_\_\_\_\_ 4.400615384615382

\_\_\_\_\_ 4.397846153846155

\_\_\_\_\_ -10.871384615384615

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -5.210153846153846

\_\_\_\_\_ 6.447692307692310

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 1.364717948717952

\_\_\_\_\_ -3.473435897435897

\_\_\_\_\_ 6.407179487179486

\_\_\_\_\_ 10.179487179487181

\_\_\_\_\_ -2.931897435897437

\_\_\_\_\_ -11.546051282051282

Aluno: MATHEUS RAMBO DA ROZA

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.84), (0.5, 1.02), (1.0, 2.23), (1.5, 1.1), (2.0, 2.95), (2.5, 2.3), (3.0, 1.15)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.1000000000000000

\_\_\_\_\_ 2.9500000000000000

\_\_\_\_\_ 2.2300000000000000

\_\_\_\_\_ 2.3000000000000000

\_\_\_\_\_ 1.0200000000000000

\_\_\_\_\_ 1.8400000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -0.399923076923077

\_\_\_\_\_ 0.5940000000000000

\_\_\_\_\_ 1.485692307692307

\_\_\_\_\_ -2.769692307692308

\_\_\_\_\_ 2.343923076923077

\_\_\_\_\_ -3.202846153846154

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -13.148307692307693

\_\_\_\_\_ -11.636307692307694

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ 15.136153846153849

\_\_\_\_\_ 9.377076923076924

\_\_\_\_\_ 1.409076923076925

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 6.251384615384616

\_\_\_\_\_ 18.856307692307695

\_\_\_\_\_ -0.939384615384617

\_\_\_\_\_ -17.848307692307696

\_\_\_\_\_ -15.016923076923078

\_\_\_\_\_ 8.696923076923079

Aluno: NILTON JOSÉ MOCELIN JÚNIOR

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 2.19), (0.5, 1.58), (1.0, 1.29), (1.5, 1.16), (2.0, 2.77), (2.5, 2.13), (3.0, 1.91)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.1600000000000000

\_\_\_\_\_ 2.1900000000000000

\_\_\_\_\_ 2.1300000000000000

\_\_\_\_\_ 1.2900000000000000

\_\_\_\_\_ 2.7700000000000000

\_\_\_\_\_ 1.5800000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -1.668512820512821

\_\_\_\_\_ -1.459589743589743

\_\_\_\_\_ 2.129333333333333

\_\_\_\_\_ -0.740820512820513

\_\_\_\_\_ -0.977128205128205

\_\_\_\_\_ 1.339794871794872

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -9.702153846153847

\_\_\_\_\_ 3.685538461538462

\_\_\_\_\_ 8.123076923076924

\_\_\_\_\_ 1.437538461538461

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -1.910153846153847

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 0.958358974358974

\_\_\_\_\_ -11.883487179487181

\_\_\_\_\_ -2.457025641025642

\_\_\_\_\_ 6.688820512820514

\_\_\_\_\_ -2.231794871794872

\_\_\_\_\_ 8.925128205128205

Aluno: PAULO ROBERTO ALBUQUERQUE

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 2.58), (0.5, 1.09), (1.0, 1.2), (1.5, 2.66), (2.0, 1.04), (2.5, 1.17), (3.0, 1.77)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 2.5800000000000000

\_\_\_\_\_ 1.1700000000000000

\_\_\_\_\_ 1.0400000000000000

\_\_\_\_\_ 1.2000000000000000

\_\_\_\_\_ 2.6600000000000000

\_\_\_\_\_ 1.0900000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -0.3419999999999999

\_\_\_\_\_ -3.508384615384615

\_\_\_\_\_ 2.921307692307693

\_\_\_\_\_ -2.513307692307692

\_\_\_\_\_ -1.923230769230769

\_\_\_\_\_ 1.455230769230769

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -13.045384615384616

\_\_\_\_\_ 8.702769230769229

\_\_\_\_\_ -0.765692307692307

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ 3.170307692307691

\_\_\_\_\_ 6.518769230769232

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 2.232307692307694

\_\_\_\_\_ -13.042769230769233

\_\_\_\_\_ 14.498769230769232

\_\_\_\_\_ 0.510461538461538

\_\_\_\_\_ -6.312307692307691

\_\_\_\_\_ 2.113538461538460

Aluno: RAFAEL DE MELO BÖEGER

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.19), (0.5, 1.36), (1.0, 1.94), (1.5, 1.98), (2.0, 1.54), (2.5, 2.79), (3.0, 1.92)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.1900000000000000

\_\_\_\_\_ 1.9800000000000000

\_\_\_\_\_ 1.3600000000000000

\_\_\_\_\_ 2.7900000000000000

\_\_\_\_\_ 1.5400000000000000

\_\_\_\_\_ 1.9400000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 0.852051282051282

\_\_\_\_\_ 1.041282051282051

\_\_\_\_\_ 1.245512820512821

\_\_\_\_\_ 1.007820512820512

\_\_\_\_\_ -1.163333333333333

\_\_\_\_\_ 0.083974358974359

 $c_0$  a  $c_5$ 

\_\_\_\_\_ 7.935384615384615

\_\_\_\_\_ -1.224615384615384

\_\_\_\_\_ -8.343846153846155

\_\_\_\_\_ 1.536153846153845

\_\_\_\_\_ -3.117692307692308

\_\_\_\_\_ 0.0000000000000000

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 1.024102564102563

\_\_\_\_\_ -1.840512820512819

\_\_\_\_\_ -1.262051282051283

\_\_\_\_\_ -10.852820512820514

\_\_\_\_\_ 7.368717948717948

\_\_\_\_\_ 5.562564102564103

Aluno: RAFAEL DOS SANTOS PEREIRA

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.73), (0.5, 2.41), (1.0, 2.94), (1.5, 1.28), (2.0, 1.1), (2.5, 2.0), (3.0, 1.3)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.1000000000000000

\_\_\_\_\_ 2.9400000000000000

\_\_\_\_\_ 2.0000000000000000

\_\_\_\_\_ 1.7300000000000000

\_\_\_\_\_ 2.4100000000000000

\_\_\_\_\_ 1.2800000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 1.911641025641025

\_\_\_\_\_ 1.665410256410256

\_\_\_\_\_ 0.467025641025641

\_\_\_\_\_ -2.808666666666666

\_\_\_\_\_ -1.470743589743590

\_\_\_\_\_ 1.084179487179488

 $c_0$  a  $c_5$ 

\_\_\_\_\_ 1.654923076923075

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -5.601076923076922

\_\_\_\_\_ -8.419692307692305

\_\_\_\_\_ 3.204307692307692

\_\_\_\_\_ 5.743846153846153

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 9.442358974358973

\_\_\_\_\_ -5.870256410256409

\_\_\_\_\_ 1.103282051282050

\_\_\_\_\_ -1.693025641025641

\_\_\_\_\_ -6.716410256410254

\_\_\_\_\_ 3.734051282051281

Aluno: ROBSON BERTHELSEN

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.2), (0.5, 1.46), (1.0, 2.74), (1.5, 2.05), (2.0, 2.87), (2.5, 1.5), (3.0, 2.91)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 2.0500000000000000

\_\_\_\_\_ 1.5000000000000000

\_\_\_\_\_ 2.8700000000000000

\_\_\_\_\_ 2.7400000000000000

\_\_\_\_\_ 1.4600000000000000

\_\_\_\_\_ 1.2000000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 2.354307692307693

\_\_\_\_\_ -0.950307692307692

\_\_\_\_\_ 0.3060000000000000

\_\_\_\_\_ -0.663923076923077

\_\_\_\_\_ -0.397153846153846

\_\_\_\_\_ 0.219923076923077

 $c_0$  a  $c_5$ 

\_\_\_\_\_ 5.502923076923079

\_\_\_\_\_ 11.310923076923077

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -11.883692307692309

\_\_\_\_\_ -9.771692307692312

\_\_\_\_\_ 9.943846153846156

 $d_0$  a  $d_5$ 

\_\_\_\_\_ 3.668615384615386

\_\_\_\_\_ 13.143692307692312

\_\_\_\_\_ -10.183076923076927

\_\_\_\_\_ -14.551692307692312

\_\_\_\_\_ 15.463076923076924

\_\_\_\_\_ -7.540615384615385



Aluno: THIAGO BRANDENBURG

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x-0) + c_0(x-0)^2 + d_0(x-0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x-0.5) + c_1(x-0.5)^2 + d_1(x-0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x-2.5) + c_5(x-2.5)^2 + d_5(x-2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.24), (0.5, 1.96), (1.0, 2.26), (1.5, 2.09), (2.0, 1.54), (2.5, 1.49), (3.0, 2.48)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 2.0900000000000000

\_\_\_\_\_ 1.2400000000000000

\_\_\_\_\_ 1.5400000000000000

\_\_\_\_\_ 1.9600000000000000

\_\_\_\_\_ 2.2600000000000000

\_\_\_\_\_ 1.4900000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ -0.8813333333333333

\_\_\_\_\_ 0.1426666666666666

\_\_\_\_\_ -0.9373333333333333

\_\_\_\_\_ 1.0306666666666666

\_\_\_\_\_ 1.0906666666666666

\_\_\_\_\_ 1.6146666666666667

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -1.0480000000000001

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -0.8479999999999999

\_\_\_\_\_ 2.8480000000000000

\_\_\_\_\_ 1.0879999999999999

\_\_\_\_\_ -1.2000000000000000

 $d_0$  a  $d_5$ 

\_\_\_\_\_ -0.6986666666666667

\_\_\_\_\_ 0.1333333333333334

\_\_\_\_\_ -1.8986666666666667

\_\_\_\_\_ 1.1733333333333334

\_\_\_\_\_ -0.2346666666666667

\_\_\_\_\_ 1.5253333333333332

Aluno: THIAGO PIMENTA BARROS SILVA

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

(0.0, 1.38), (0.5, 2.6), (1.0, 1.76), (1.5, 1.5), (2.0, 2.02), (2.5, 1.46), (3.0, 1.29)

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 1.5000000000000000

\_\_\_\_\_ 2.6000000000000000

\_\_\_\_\_ 1.7600000000000000

\_\_\_\_\_ 1.3800000000000000

\_\_\_\_\_ 1.4600000000000000

\_\_\_\_\_ 2.0200000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 0.8660000000000000

\_\_\_\_\_ 3.585153846153847

\_\_\_\_\_ -1.105692307692308

\_\_\_\_\_ 0.149692307692308

\_\_\_\_\_ -0.000076923076923

\_\_\_\_\_ -1.903923076923077

 $c_0$  a  $c_5$ 

\_\_\_\_\_ -6.870923076923079

\_\_\_\_\_ 2.297076923076923

\_\_\_\_\_ 2.776153846153846

\_\_\_\_\_ -4.508307692307692

\_\_\_\_\_ 2.763692307692309

\_\_\_\_\_ 0.0000000000000000

 $d_0$  a  $d_5$ 

\_\_\_\_\_ -4.580615384615386

\_\_\_\_\_ 4.536923076923078

\_\_\_\_\_ 6.423076923076924

\_\_\_\_\_ -4.856307692307692

\_\_\_\_\_ -1.531384615384616

\_\_\_\_\_ 0.008307692307691

Aluno: VINICIUS GASPARINI

Submeter até: 20/10/2019 23:59hs

**Q1** Encontre os coeficientes do spline cúbico natural  $S(x)$ 

$$S(x) = \begin{cases} S_0(x) = a_0 + b_0(x - 0) + c_0(x - 0)^2 + d_0(x - 0)^3, & \text{se } x \in [0, 0.5] \\ S_1(x) = a_1 + b_1(x - 0.5) + c_1(x - 0.5)^2 + d_1(x - 0.5)^3, & \text{se } x \in [0.5, 1] \\ \vdots \\ S_5(x) = a_5 + b_5(x - 2.5) + c_5(x - 2.5)^2 + d_5(x - 2.5)^3, & \text{se } x \in [2.5, 3] \end{cases}$$

que passa pela seguinte lista de 7 pontos

$$(0.0, 1.94), (0.5, 1.69), (1.0, 2.17), (1.5, 2.55), (2.0, 1.25), (2.5, 1.69), (3.0, 1.28)$$

 $a_0$  a  $a_5$ 

\_\_\_\_\_ 2.5500000000000000

\_\_\_\_\_ 1.2500000000000000

\_\_\_\_\_ 2.1700000000000000

\_\_\_\_\_ 1.6900000000000000

\_\_\_\_\_ 1.9400000000000000

\_\_\_\_\_ 1.6900000000000000

 $b_0$  a  $b_5$ 

\_\_\_\_\_ 0.141846153846154

\_\_\_\_\_ 1.633538461538461

\_\_\_\_\_ -1.089538461538462

\_\_\_\_\_ -1.5160000000000000

\_\_\_\_\_ -0.820923076923077

\_\_\_\_\_ 0.714153846153846

 $c_0$  a  $c_5$ 

\_\_\_\_\_ 1.057846153846153

\_\_\_\_\_ 8.209846153846152

\_\_\_\_\_ 0.0000000000000000

\_\_\_\_\_ -7.356923076923076

\_\_\_\_\_ -4.602461538461537

\_\_\_\_\_ 1.925538461538462

 $d_0$  a  $d_5$ 

\_\_\_\_\_ -8.541538461538460

\_\_\_\_\_ 1.283692307692308

\_\_\_\_\_ -0.578461538461539

\_\_\_\_\_ -5.609846153846153

\_\_\_\_\_ 3.068307692307692

\_\_\_\_\_ 10.377846153846152