

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 2 MATH 207: Discrete Mathematics II

Let  $G$  be the complete graph on vertices  $\{0, \dots, 5\}$  such that the weights of its edges are recorded in the following table.

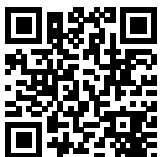
	0	1	2	3	4	5
0		5	19	3	9	4
1			16	15	16	13
2				7	4	16
3					1	13
4						14
5						

Recall that the weight of a spanning tree is the sum of its edge weights. Find a spanning tree of  $G$  with the minimum weight.

Check code = (weight of your spanning tree) mod 10

**Solution.**

MinSpanTree 1



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 2 MATH 207: Discrete Mathematics II

Let  $G$  be the complete graph on vertices  $\{0, \dots, 5\}$  such that the weights of its edges are recorded in the following table.

	0	1	2	3	4	5
0		2	3	3	12	6
1			10	9	20	7
2				20	2	19
3					6	14
4						13
5						

Recall that the weight of a spanning tree is the sum of its edge weights. Find a spanning tree of  $G$  with the minimum weight.

Check code = (weight of your spanning tree) mod 10

**Solution.**

MinSpanTree 2



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 2 MATH 207: Discrete Mathematics II

Let  $G$  be the complete graph on vertices  $\{0, \dots, 5\}$  such that the weights of its edges are recorded in the following table.

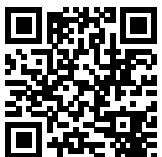
	0	1	2	3	4	5
0		8	19	18	5	12
1			20	16	19	3
2				20	1	16
3					9	18
4						8
5						

Recall that the weight of a spanning tree is the sum of its edge weights. Find a spanning tree of  $G$  with the minimum weight.

Check code = (weight of your spanning tree) mod 10

**Solution.**

MinSpanTree 3



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 2 MATH 207: Discrete Mathematics II

Let  $G$  be the complete graph on vertices  $\{0, \dots, 5\}$  such that the weights of its edges are recorded in the following table.

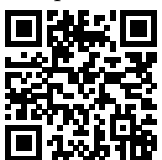
	0	1	2	3	4	5
0		8	10	4	13	16
1			5	3	3	1
2				13	18	10
3					2	8
4						17
5						

Recall that the weight of a spanning tree is the sum of its edge weights. Find a spanning tree of  $G$  with the minimum weight.

Check code = (weight of your spanning tree) mod 10

**Solution.**

MinSpanTree 4



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 2 MATH 207: Discrete Mathematics II

Let  $G$  be the complete graph on vertices  $\{0, \dots, 5\}$  such that the weights of its edges are recorded in the following table.

	0	1	2	3	4	5
0		20	9	12	17	1
1			15	8	2	6
2				4	12	16
3					8	13
4						18
5						

Recall that the weight of a spanning tree is the sum of its edge weights. Find a spanning tree of  $G$  with the minimum weight.

Check code = (weight of your spanning tree) mod 10

**Solution.**

MinSpanTree 5



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
 Quiz 2 MATH 207: Discrete Mathematics II

Let  $G$  be the complete graph on vertices  $\{0, \dots, 5\}$  such that the weights of its edges are recorded in the following table.

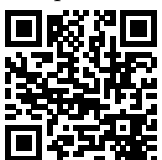
	0	1	2	3	4	5
0		19	3	16	9	2
1			1	5	19	16
2				12	11	1
3					9	16
4						7
5						

Recall that the weight of a spanning tree is the sum of its edge weights. Find a spanning tree of  $G$  with the minimum weight.

Check code = (weight of your spanning tree) mod 10

**Solution.**

MinSpanTree 6



Indicating your answer by **underlining it** or **circling it**.  
 Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 2 MATH 207: Discrete Mathematics II

Let  $G$  be the complete graph on vertices  $\{0, \dots, 5\}$  such that the weights of its edges are recorded in the following table.

	0	1	2	3	4	5
0		11	5	13	2	3
1			18	4	12	19
2				2	17	7
3					2	3
4						14
5						

Recall that the weight of a spanning tree is the sum of its edge weights. Find a spanning tree of  $G$  with the minimum weight.

Check code = (weight of your spanning tree) mod 10

**Solution.**

MinSpanTree 7



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 2 MATH 207: Discrete Mathematics II

Let  $G$  be the complete graph on vertices  $\{0, \dots, 5\}$  such that the weights of its edges are recorded in the following table.

	0	1	2	3	4	5
0		8	12	13	5	7
1			2	3	5	8
2				17	7	13
3					1	15
4						16
5						

Recall that the weight of a spanning tree is the sum of its edge weights. Find a spanning tree of  $G$  with the minimum weight.

Check code = (weight of your spanning tree) mod 10

**Solution.**

MinSpanTree 8



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code



姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 2 MATH 207: Discrete Mathematics II

Let  $G$  be the complete graph on vertices  $\{0, \dots, 5\}$  such that the weights of its edges are recorded in the following table.

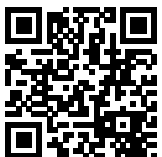
	0	1	2	3	4	5
0		15	20	12	9	5
1			6	1	11	17
2				15	20	3
3					11	18
4						20
5						

Recall that the weight of a spanning tree is the sum of its edge weights. Find a spanning tree of  $G$  with the minimum weight.

Check code = (weight of your spanning tree) mod 10

**Solution.**

MinSpanTree 9



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 2 MATH 207: Discrete Mathematics II

Let  $G$  be the complete graph on vertices  $\{0, \dots, 5\}$  such that the weights of its edges are recorded in the following table.

	0	1	2	3	4	5
0		19	2	14	16	19
1			1	7	15	16
2				9	6	2
3					17	16
4						11
5						

Recall that the weight of a spanning tree is the sum of its edge weights. Find a spanning tree of  $G$  with the minimum weight.

Check code = (weight of your spanning tree) mod 10

**Solution.**

MinSpanTree 10



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code