



UIL Computer Science Competition

District 2017

JUDGES PACKET - CONFIDENTIAL

I. Instructions

1. The attached printouts of the judge test data are provided for the reference of the contest director and programming judges. Additional copies may be made if needed for this purpose.
2. This packet must remain CONFIDENTIAL. Additional copies may be made and returned to schools when other confidential contest material is returned.

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Problem #1
60 Points

1. Alexey

Program Name: Alexey.java

Test Input File: alexey.dat

Test Input File: alexey.dat

```
RS 4 45
LS 2 13
RC 3 81
N 23
A 23 14
O 23 14
X 23 14
LC 5 119
O 99 100
LS 5 513
X 255 390
RC 5 181
LC 8 999
N 256
RS 10 1200
RS 11 1200
A 632 15
RC 10 1200
LC 10 1200
```

Test Output To Screen

```
2
52
26
8
6
31
25
125
103
16416
377
1389
1017
255
1
0
8
361648
600
```

Problem #2
60 Points

2. Beverly

Program Name: Beverly.java

Input File: none

Test Input File: none

Test Output To Screen

Answer will vary, but should be a creative, fun, and respectful greeting to you, the judges. It should be one complete sentence, all on one line. Please be liberal with your “Yes”, and accept just about anything, unless you deem it inappropriate or offensive.

Problem #3
60 Points

3. Dong-Sun

Program Name: DongSun.java

Test Input File: dongsun.dat

Test Input File: dongsun.dat

10	10 -> 5	13 -> 13
4	15 -> 5	19 -> 31
10 -> 2	5 -> 5	21 -> 103
5 -> 4	3 -> 5	1031 -> 1
2 -> 6	1	34 -> 31
8 -> 1	3 -> 2502	13 -> 10
10	4	10 -> 25
3 -> 4	1 -> 2	23 -> 10
1 -> 2	4 -> 3	2 -> 20
2 -> 3	3 -> 5	2 -> 10
6 -> 7	5 -> 4	10 -> 32
10 -> 1	6	21 -> 19
8 -> 9	1 -> 2	18 -> 19
4 -> 5	4 -> 5	32 -> 3
9 -> 10	3 -> 7	12 -> 1
5 -> 6	4 -> 6	1 -> 15
7 -> 8	5 -> 6	15 -> 2
6	9 -> 6	6
1 -> 15	3	3 -> 51
2 -> 8	3 -> 1	5 -> 52
8 -> 3	1 -> 2	7 -> 53
9 -> 2	2 -> 2	9 -> 54
10 -> 2	20	54 -> 51
11 -> 15	4 -> 5	53 -> 50
5	6 -> 10	
1 -> 5	10 -> 3	

Test Output To Screen

Approved Applications: 10 -> 2, 8 -> 1
 Approved Applications: 3 -> 4, 1 -> 2, 2 -> 3, 6 -> 7, 8 -> 9, 4 -> 5, 9 -> 10, 5 -> 6, 7 -> 8
 Approved Applications: 9 -> 2, 10 -> 2, 11 -> 15
 Approved Applications: 1 -> 5, 10 -> 5, 15 -> 5, 5 -> 5, 3 -> 5
 Approved Applications: 3 -> 2502
 Approved Applications: 1 -> 2, 4 -> 3, 5 -> 4
 Approved Applications: 1 -> 2, 4 -> 5, 4 -> 6, 5 -> 6, 9 -> 6
 Approved Applications: 1 -> 2, 2 -> 2
 Approved Applications: 4 -> 5, 6 -> 10, 34 -> 31, 13 -> 10, 21 -> 19, 18 -> 19
 Approved Applications: 3 -> 51, 5 -> 52, 7 -> 53, 9 -> 54

Problem #4
60 Points

4. Gan

Program Name: Gan.java

Input File: gan.dat

Test Input File: gan.dat

2 5 3 12 25 20 33 39

Test Output To Screen

```
-----  
2      12.6      12.6      50.3      33.5  
5      31.4      78.5      314.2     523.6  
3      18.8      28.3      113.1     113.1  
12     75.4     452.4     1809.6    7238.2  
25    157.1    1963.5     7854.0   65449.8  
20    125.7    1256.6     5026.5   33510.3  
33    207.3    3421.2    13684.8  150532.6  
39    245.0    4778.4    19113.4 248474.8  
-----
```

Problem #5
60 Points

5. Hyo

Program Name: Hyo.java

Test Input File: hyo.dat

Test Input File: hyo.dat

10	4
3	A: B C D
Annie: Bahi	B: A C D
Bahi: Carthik Annie	C: A B D
Carthik: Bahi	D: A B C
Annie Carthik	D C
6	6
Salem: Charlie Maona Blaze Cram	A: B
Charlie: Maona Joana Salem	B: C A
Maona: Charlie Salem	C: D B
Blaze: Salem Cram	D: E C
Cram: Salem Blaze	E: F D
Joana: Charlie	F: E
Salem Maona	F A
11	3
Arya: Cher Ying	A: B C
Erik: Qa	B: A
Cher: Arya Bo	C: A
Qi: Shome Thor	C A
Ying: Arya Bo	10
Qa: Thor Erik	A: B J
Bo: Ying Cher Yoshie	B: C A
Yoshie: Bo Pradip	C: D B
Pradip: Yoshie Shome	D: E C
Shome: Pradip Qi	E: F D
Thor: Qi Qa	F: G E
Erik Arya	G: H F
11	H: I G
Arya: Cher Ying	I: J H
Erik: Qa	J: I A
Cher: Arya Bo	D J
Qi: Shome Thor	10
Ying: Arya	A: B J
Qa: Thor Erik	B: C A
Bo: Ying Cher Yoshie	C: D B
Yoshie: Bo Pradip	D: E C
Pradip: Yoshie Shome	E: F D
Shome: Pradip Qi	F: G E
Thor: Qi Qa	G: H F
Arya Erik	H: I G
2	I: J H
A: B	J: I A
B: A	H D
B A	

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Hyo - Test Output To Screen

The degree of separation between Annie and Carthik is 2.

Annie is a friend of Bahi is a friend of Carthik.

The degree of separation between Salem and Maona is 1.

Salem is a friend of Maona.

The degree of separation between Erik and Arya is 9.

Erik is a friend of Qa is a friend of Thor is a friend of Qi is a friend of

Shome is a friend of Pradip is a friend of Yoshie is a friend of Bo is a

friend of Ying is a friend of Arya.

The degree of separation between Arya and Erik is 9.

Arya is a friend of Cher is a friend of Bo is a friend of Yoshie is a friend

of Pradip is a friend of Shome is a friend of Qi is a friend of Thor is a

friend of Qa is a friend of Erik.

The degree of separation between B and A is 1.

B is a friend of A.

The degree of separation between D and C is 1.

D is a friend of C.

The degree of separation between F and A is 5.

F is a friend of E is a friend of D is a friend of C is a friend of B is a friend of A.

The degree of separation between C and A is 1.

C is a friend of A.

The degree of separation between D and J is 4.

D is a friend of C is a friend of B is a friend of A is a friend of J.

The degree of separation between H and D is 4.

H is a friend of G is a friend of F is a friend of E is a friend of D.

Problem #6
60 Points

6. Judy

Program Name: judy.java

Input File: judy.dat

Test Input File: judy.dat

```
MNA CJD JKL D-M
SAL ATR
HB- BA- ADE
XW- WJB BCA
D-G G-H H-C C-A A-X X-Z
X-Z A-X C-A H-C G-H D-G
BCD DAE
BCD DEA
BCD DEF E-X FGH GA- CJK
E-X CJK FGH G-A BCD DEF
ABC
```

Test Output To Screen

```
14
1
3
10
30
30
5
6
27
28
0
```


7. Kate

Program Name: Kate.java

Test Input File: kate.dat

Test Input File: kate.dat

```
10
1.0x^5 + 2.2x^3 + 3.23x^4 + 4 - 3.2x
-1.4 1.6 0.1
9.323x^3 - 9x + 3
1 2 0.5
2x^2 - 1
-1 1 0.001
1.0
0 1 1
3x - 3x
-5 5 0.1
3x^10 - 4x^10
-3.32 -3.15 0.01
1.1x^1 + 1.2x^2 + 1.3x^3 + 1.4x^4 + 1.5x^5 + 1.6x^6 + 1.7x^7 + 1.8x^8 - 12
1.0 2.0 0.1
10.3x
-38.8 -26.2 0.2
4
0 100 1
4
0 100 0.01
```

Test Output To Screen

```
22.91
12.14
-0.67
1.00
0.00
-22857.24
166.85
-4230.83
400.00
400.00
```

Problem #8
60 Points

8. Michael

Program Name: michael.java

Input File: michael.dat

Test Input File: michael.dat

```
5 A 2 5 C 5 7 B 7 6 C 8 1 A 4 3
6 A 3 7 B 3 7 C 4 7 B 5 5 C 6 5 B 5 6
6 A 4 4 C 6 2 B 4 6 B 7 3 C 8 4 A 6 4
3 A 5 5 B 5 5 C 5 5
4 A 4 4 A 6 3 B 3 3 C 7 3
4 B 4 6 B 5 6 A 6 4 C 7 3
5 A 1 3 B 1 8 C 8 1 B 7 8 A 4 4
5 A 1 3 A 2 4 A 3 5 C 8 1 C 7 2
4 B 1 8 C 8 1 A 6 3 B 2 7
6 A 4 4 B 1 3 C 4 7 C 5 3 B 2 6 A 5 4
8 A 2 8 B 2 8 C 8 1 B 7 3 C 6 2 A 3 4 B 3 4 C 4 3
```

Test Output To Screen

```
22
16
21
11
15
17
25
24
16
24
26
```

Problem #9
60 Points

9. Neelam

Program Name: Neelam.java

Input File: neelam.dat

Test Input File: neelam.dat

56290
4371
802
9999
3
2000
87654

Test Output To Screen

	802	3
56290	oo	o
o o	o	
oo o	===	=
=====	o o	o
ooo	ooo	o
o ooo	oo	o
oo oo	oo	
ooooo	ooo	o
ooo o		
	9999	2000
4371		oooo
oo o	oooo	
o	=====	=====
=====	oooo	o
oooo	oooo	oooo
ooo	oooo	ooo
oo o	oooo	oooo
o oo		oooo
ooo		
		87654
		o
		oooo
		=====
		ooo o
		oo oo
		o ooo
		oooo
		oooo

Problem #10

60 Points

10. Pratik

Program Name: Pratik.java

Test Input File: pratik.dat

Test Input File: pratik.dat

```
10
4:53 pm
Aunt Tapasi
8:59 am
Second Cousin Bongsi
6:07 pm
Mom
12:00 am
Cousin Gulasyl
12:00 am
Grandpa Aadi
```

```
12:15 pm
Grandpa Aadi
12:00 am
Mom
11:59 pm
Mom
10:47 am
Uncle Ardem
8:03 am
Second Cousin Bongsi
```

Test Output To Screen

```
##### # # ##### #####
# # # # . # #
# # ##### ##### #####
# # # . # #
##### # ##### #####

# ##### ##### #####
# # . # # #
# ##### ##### #####
# # # . # #
# ##### ##### #####

# ##### ##### #####
# # # . # # #
# ##### # # #
# # # . # # #
# ##### ##### #

# # ##### #####
# # . # # #
# # # # #
# # . # # #
# # ##### #####

# # # # #####
# # . # # #
# # ##### #####
# # . # #
# # # #####
```

```
##### ##### ##### #####
# # # # . # # #
# # # # # # #
# # # # . # # #
##### ##### #####

##### ##### ##### #####
# # # # . # # #
# # # # # # #
# # # # . # # #
##### ##### #####

##### ##### ##### #####
# # # . # # #
##### ##### #####
# # # #
##### # # #

# ##### # # #####
# # # . # # #
# # # ##### #
# # # . # #
# ##### # #

# ##### ##### #####
# # # . # # #
# ##### # # #####
# # # . # #
# ##### #####
```

Problem #11

60 Points

11. Ralph

Program Name: Ralph.java

Input File: ralph.dat

Test Input File: ralph.dat

```
12345
32677
33445
60405
10503
32767
32684
33405
67405
99939
99929
21812
95842
98765
```

Test Output To Screen

```
32541
32767
EXCEEDS MAX VALUE
6540
31500
32767
32684
30543
7654
EXCEEDS MAX VALUE
29999
28211
29854
EXCEEDS MAX VALUE
```

Problem #12

60 Points

12. Suresh

Program Name: Suresh.java

Input File: suresh.dat

Test Input File: suresh.dat (each paragraph is all on one line in the data file)

To be or not to be, that's the question.

A wise man is not one who knows all the answers. But one who knows how to find the answers. A foolish man is one who knows neither.

Did he ever return? No, he never returned and his fate is still unknown. He may ride forever neath the streets of Boston, he's the man who never returned.

Oh, somewhere in this favored land the sun is shining bright, the band is playing somewhere, and somewhere hearts are light. And somewhere men are laughing, and little children shout; but there is no joy in Mudville. Mighty Casey has struck out.

Whose woods these are? I think I know. His house in the village though. He will not see me stopping here, to watch his woods fill up with snow.

My little horse must think it queer, to stop without a farmhouse near.

Between the woods and frozen lake: the darkest evening of the year.

He gives his harness bells a shake, to ask if there is some mistake. The only other sound's the sweep of easy wind and downy flake.

These woods are lovely, dark, and deep; but I have promises to keep, and miles to before I sleep, and miles to before I sleep.

Test Output To Screen

```
1 9 question
3 11 answers 9 answers 8 neither
3 4 return 10 returned 15 returned
3 21 somewhere 16 somewhere 5 struck
4 4 these 4 think 6 village 15 stopping
2 13 farmhouse 12 evening
2 14 mistake 12 sound's
1 25 promises
```