UIL Computer Science Competition

Invitational A 2025

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. Alberto

Program Name: Alberto.java **Input File: None**

Test Input File:
None

Test Output To Screen:

```
 ___     ___  ___    ______
|__ \   / _ \|__ \  | _____|
   ) || | | |   ) || |__
  / / | | | | / / |___ \
 / /_ | |_| |/ /_  ___) |
|____| \___/|____||____/
```

Problem #2
60 Points

2. Anisha

Program Name: Anisha.java **Input File: anisha.dat**

Test Input File:

```
15
19 36
10 36
25 25
30 35
3 16
15 16
100 100
0 100
0 16
15 100
5 6
7 8
19 20
16 20
15 20
```

Test Output To Screen:

```
Way to go, H2O.
On my way to Dehydration Station.
Way to go, H2O.
Way to go, H2O.
On my way to Dehydration Station.
Way to go, H2O.
Way to go, H2O.
On my way to Dehydration Station.
On my way to Dehydration Station.
Way to go, H2O.
On my way to Dehydration Station.
On my way to Dehydration Station.
Way to go, H2O.
Way to go, H2O.
Way to go, H2O.
```

Problem #3
60 Points

3. Danielle

Program Name: Danielle.java **Input File: danielle.dat**

Test Input File:

```
500
8,9,6,6
4,2,8,9
4,4,7,5
2,8,8,5
7,3,6,5
9,2,6,8
9,6,9,6
5,2,8,6
7,9,4,4
1,8,3,7
6,2,5,8
5,7,8,7
2,3,3,9
6,2,6,6
2,7,7,4
9,5,3,4
6,9,6,8
8,9,8,8
9,5,8,5
7,2,5,7
2,8,4,8
6,3,6,7
3,4,8,9
9,6,3,5
2,8,8,4
8,6,4,6
7,3,7,7
7,8,9,4
5,3,7,5
4,2,6,7
4,4,8,8
8,7,4,5
9,3,6,5
7,8,8,9
6,9,5,8
4,7,5,4
4,3,9,7
5,2,5,5
9,7,4,4
9,6,5,6
9,7,9,5
```

Continues next column…

Continued from previous column…

```
6,3,8,5
3,4,7,5
7,2,8,9
8,4,7,8
6,3,7,9
6,5,3,9
5,7,9,7
5,5,7,8
8,7,7,9
6,9,7,7
7,7,7,6
3,4,7,6
9,6,8,9
4,3,5,6
6,5,7,9
2,6,8,5
5,8,3,4
1,7,9,6
2,2,7,5
7,7,4,4
5,6,5,4
6,2,4,8
5,3,9,7
3,2,3,7
9,6,6,6
7,7,5,8
1,5,5,5
4,9,6,4
3,5,3,4
1,5,3,8
3,5,3,5
7,9,3,6
8,4,7,5
1,4,9,7
6,5,6,6
9,7,9,4
3,5,6,5
9,6,4,8
8,4,9,9
6,9,4,9
1,6,7,9
2,8,5,5
```

Continues next column…

Continued from previous column…

```
8,2,9,8
3,4,3,8
8,5,3,5
8,8,6,5
6,5,7,9
1,9,7,5
3,6,5,6
7,4,4,7
2,2,4,4
5,2,4,7
8,3,4,9
2,6,8,8
3,9,5,5
2,9,7,5
7,3,6,5
2,4,5,4
3,4,6,8
8,9,7,6
1,4,8,5
5,2,9,9
5,7,8,4
7,4,5,9
8,8,7,9
7,8,7,5
4,4,3,6
2,9,7,6
9,8,5,9
9,2,4,5
7,2,8,4
1,3,4,9
6,3,7,9
9,2,9,4
3,8,6,8
4,4,7,9
5,6,3,4
7,8,8,9
4,7,5,9
2,4,4,9
1,8,3,5
4,2,3,4
3,8,6,4
1,9,3,4
```

Continues...

~ For complete view of data, see.dat file ~

~ Daniel output on next page… ~

~ Danielle continued… ~

Test Output To Screen:

```
1295
2884
814
920
736
2241
1485
1373
142
1567
2166
1922
2531
1230
335
36
2301
2447
900
1663
2144
1743
2901
549
416
1124
1816
493
806
1732
2398
629
738
2941
2229
193
1957
653
126
1197
990
879
813
2887
2330
2823
2553
1994
2336
```

Continues next column…

Continued from previous column…

```
2861
1869
1348
1317
2925
1165
2841
902
59
1486
794
124
185
2094
1958
1515
1269
2212
676
283
30
2044
534
1078
818
1963
1257
486
750
2133
2978
2661
2845
704
2456
2037
539
782
2841
856
1191
1609
74
1589
2609
2414
714
857
736
```

Continues next column…

Continued from previous column…

```
164
2253
1367
883
2957
410
2689
2870
853
1030
1361
2727
585
367
2602
2823
441
2289
2830
41
2941
2713
2612
559
4
273
64
2463
1579
208
2449
1858
1261
2835
254
839
82
1000
2109
2657
618
1159
578
207
1864
1972
961
1375
864
```

Continues…

~ For complete view of output, see .out file ~

Problem #4
60 Points

4. Dominik

Program Name: Dominik.java **Input File: dominik.dat**

Test Input File:

```
12 17
1776/07/04 Declaration of Independence Signed
1564/04/23 William Shakespeare Born
1804/05/18 Napoleon Gains Power in France
1959/01/03 Alaska Becomes 49th State
1000/01/01 A
1000/01/01 B
2000/02/02 C
3000/03/03 D
0000/04/04 E
4000/05/05 F
2000/12/31 G
2134/10/15 H
Declaration of Independence Signed:Napoleon Gains Power in France
Declaration of Independence Signed:William Shakespeare Born
William Shakespeare Born:Alaska Becomes 49th State
A:B
B:C
C:D
D:E
E:F
F:A
A:E
C:E
A:A
F:B
B:D
E:C
G:H
H:G
```

Test Output To Screen:

```
10,179
77,504
144,160
0
365,274
365,272
1,095,695
1,461,001
1,095,852
365,149
730,423
0
1,095,852
730,546
730,423
48,865
48,865
```

Problem #5
60 Points

5. Filip

Program Name: Filip.java **Input File: filip.dat**

Test Input File:

```
14
5 6 * true
4 7 # false
12 12 % true
14 15 @ false
1 1 $ true
1 1 $ false
2 2 & true
2 2 & false
3 3 ^ true
3 3 ^ false
1 6 % false
15 3 > false
3 12 < false
9 1 ? true
```

Test Output To Screen:

```
******
******
******
******
******
#######
#     #
#     #
#######
%%%%%%%%%%%%
%%%%%%%%%%%%
%%%%%%%%%%%%
%%%%%%%%%%%%
%%%%%%%%%%%%
%%%%%%%%%%%%
%%%%%%%%%%%%
%%%%%%%%%%%%
%%%%%%%%%%%%
%%%%%%%%%%%%
%%%%%%%%%%%%
%%%%%%%%%%%%
@@@@@@@@@@@@@@@@
@               @
@               @
@               @
@               @
@               @
@               @
@               @
@               @
@               @
@               @
@               @
@@@@@@@@@@@@@@@@
$
$
&&
&&
&&
&&
```

~ Continues next column ~

~ Continued from previous column ~

```
^^^
^^^
^^^
^^^
^ ^
^^^
%%%%%%
>>>
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
>>>
<<<<<<<<<<<<
<           <
<<<<<<<<<<<<
?
?
?
?
?
?
?
?
?
```

Problem #6
60 Points

6. Helen

Program Name: Helen.java **Input File: helen.dat**

Test Input File:

```
15
2x + 7 = 15
13 * 26 = 3x
x - 2 = 9
56 - 3b = -68
10c * 7 = 70
-6x / 5 = 36
7 * -3h = -63
36 / y = -9
100 + 10k = 200
120 - 130 = p
890 / 32 = r
3 + 4 = e
32f / 2483 = 182
12j * 392 = 7493
19374 / 45m = 9506
```

Test Output To Screen:

```
x = 4.000
x = 112.667
x = 11.000
b = 4.000
c = 1.000
x = -30.000
h = 3.000
y = -4.000
k = 10.000
p = -10.000
r = 27.000
e = 7.000
f = 14122.063
j = 1.583
m = 0.044
```

Problem #7
60 Points

7. Jason

Program Name: Jason.java **Input File: jason.dat**

Test Input File:

```
3.53 2.74 16.90 3.73 18.71 1.98 7.73 7.49 0.21 12.99 1.56 10.09 1.55 5.84 1.85
13.78 6.68 16.63 8.08 3.31 17.79 13.67 12.10 3.40 10.41 2.60 12.33 8.84 3.93
12.64 16.72 5.82 19.91 4.37 9.66 14.78 10.16 9.01 18.00 16.81 11.98 8.89 7.08
18.67 8.72 19.28 8.94 4.40 0.69 12.85 11.66 15.80 3.48 19.98 1.44 18.31 8.46
0.04 7.13 4.16 4.09 12.38 10.57 0.44 5.21 18.72 15.72 6.08 12.76 3.46 14.40
18.96 6.15 2.79 7.10 11.72 16.98 9.43 13.82 13.65 3.94 5.53 1.40 14.34 6.31
13.27 1.75 4.96 15.96 19.93 18.23 12.61 16.53 12.38 16.27 4.51 12.32 4.13 8.81
19.85 9.23 17.93 17.08 9.40 15.40 16.12 12.87 5.44 0.17 12.03 9.75 8.18 6.53
6.29 7.60 18.37 14.50 14.13 7.26 10.79 0.61 1.77 0.38 8.06 12.20 13.07 3.16 0.30
14.31 1.44 2.27 2.53 11.67 5.88 15.95 8.72 18.52 5.22 4.36 8.96 5.05 9.88 9.05
4.85 10.89 6.75 3.75 6.73 3.08 19.35 15.82 6.33 9.00 3.07 11.19 8.10 13.03 2.95
4.08 13.86 9.97 0.27 17.39 6.41 17.69 3.48 19.64 9.83 7.18 18.78 19.86 17.17
8.71 6.07 13.24 9.16 19.79 7.36 17.25 1.80 12.49 6.24 0.29 14.91 15.79 19.37
3.22 9.36 11.83 14.20 8.01 16.02 14.28 10.32 16.69 16.18 11.48 16.57 9.39 10.15
17.63 0.43 10.48 8.54 0.88 2.04 8.23 18.75 9.30 11.14 5.31 18.50 12.23 2.09 5.01
7.35 18.02 9.25 1.05 7.88 17.13 3.32 17.84 8.31 13.92 17.61 2.23 0.53 9.99 12.48
17.99 8.85 7.46 16.21 19.74 7.98 11.34 0.77 4.49 11.80 6.81 2.44 15.67 18.43
9.43 18.54 7.22 1.72 14.28 4.34 3.27 4.39 3.03 16.82 12.93 13.93 7.71 5.76 18.90
8.75 13.95 16.99 13.70 9.03 17.35 7.11 8.09 14.64 2.26 14.94 2.24 0.50 13.98
10.71 12.45 8.95 2.51 10.96 3.45 7.98 8.99 4.38 9.57 14.68 4.10 1.80 16.87 13.72
12.17 2.27 2.73 12.28 4.09 16.18 9.21 4.96 17.78 6.60 2.48 14.79 5.56 0.02 1.59
9.57 14.76 19.29 6.92 7.22 19.75 2.87 0.99 17.71 1.63 17.19 12.80 4.92 15.22
1.67 10.13 7.09 11.93 9.76 14.20 11.28 2.18 3.35 15.50 14.24 0.79 3.12 10.90
19.57 5.29 12.48 17.78 19.62 8.38 19.18 13.32 9.32 2.94 15.33 14.29 18.86 0.99
3.72 15.99 11.99 16.43 16.72 7.72 17.99 15.29 2.27 16.50 6.27 17.16 10.91 0.83
15.05 16.69 7.63 1.94 7.93 4.97
```

Test Output To Screen:

```
      *****       *****       ***** *****                       *****
      ***** ***** *****       ***** ***** ***** *****       ***** *****
      ***** ***** *****       ***** ***** ***** *****       ***** *****
***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** *****
***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** *****
***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** *****
***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** *****
***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** *****
***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** *****
***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** *****
***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** *****
 Jan   Feb   Mar   Apr   May   Jun   Jul   Aug   Sep   Oct   Nov   Dec
```

Problem #8
60 Points

8. Juliana

Program Name: Juliana.java **Input File: juliana.dat**

Test Input File:

```
17 15
Sam Franklin: 6 CS CS John Adams Tom Jennings
John Adams: 3 Music Accounting D D
Tom Jennings: 2 CS Accounting Sam Franklin
George Paul: 2 Accounting CS Tom Jennings
James Lebron: 4 Music CS John Adams
A A: 5 AA BB B B C C D D E E F F
B B: 3 BB BB A A G G H H C C E E
C C: 10 AA DD H H G G F F E E I I
D D: 1 DD CC J J B B E E F F G G
E E: 3 EE EE G G H H
F F: 4 DD EE B B G G A A F F
G G: 6 BB BB C C
H H: 8 BB BB A A I I J J
I I: 2 BB EE Sam Franklin J J B B E E
J J: 7 EE CC Tom Jennings C C F F
Sam Franklin
2 CS
James Lebron
4 Accounting
George Paul
2 Accounting
A A
4 BB
H H
5 BB
J J
9 BB
John Adams
5 CC
B B
1 Accounting
Tom Jennings
4 AA
A A
3 BB
C C
2 CC
I I
1 DD
J J
1 BB
F F
1 WW
C C
1 AA
E E
1 BB
H H
1 EE
```

Test Output To Screen:

```
Tom Jennings

John Adams, Tom Jennings
G G, H H
A A, G G

J J
John Adams, Tom Jennings
A A, C C
B B, G G, H H
J J
C C, D D, F F
A A, B B, G G, H H, I I

A A
A A, B B, G G, H H, I I
E E, F F, I I, J J
```

Problem #9
60 Points

9. Ksenyia

Program Name: Ksenyia.java **Input File: ksenyia.dat**

Test Input File:

```
15
ComedicTiming17
Rocket@1776ABC
BenHornSheep
qw3RTYuiooo!
JabbaTheDominoHuttIsBig
ForsakenMY$45
ComedicTiming17
Rocket@1776ABCD
BenHornSheep94
qw3RTYuiooo!
BenHornSheep94
JabbaTheDominoHuttIsBig$%^3536263624652642654
ABCD
A3s%
aBCDEFGRTEYRGE
Rocket@1776 ABC
H3lloThereG^&
ROCKET@1776ABC
BenHornSheep945
rocket@1776abc
BenHornSheep95
Rocket@ABDEFG
BenHornSheep96
Rocket1776ABCD
BenHornSheep97
H3L!00Theree%%
BenHornSheep98
H3L!000There%%
BenHornSheep99
H33L!00There%%
```

Test Output To Screen:

```
Valid
Password Invalid
Username Invalid
Username Invalid
Password Invalid
Password Invalid
Both Invalid
Both Invalid
Both Invalid
Password Invalid
Password Invalid
Password Invalid
Valid
Password Invalid
Valid
```

Problem #10
60 Points

10. Martyn

Program Name: Martyn.java **Input File: martyn.dat**

Test Input File:

```
250000
1098247
4201
1671766481
35
7
192031777
814400748
24320096
444619405
1438991709
493761175
197548772
316831436
4447240
11
20
1343203186
2
10
204685
3956631
37485160
11
126433448
5591135
238607607
2394741
29
544992435
19488
24
1989791520
876042
5
4766285
837049857
679022757
1241755325
1466039118
165421938
420895080
177313
1523665343
29213259
```

~ Continues next col ~

~ Continue previous col ~

```
10042186
1689533060
134693410
40606963
1730
73008
1672415100
1584938668
26712
9
678797226
19
354841745
37959384
595961075
1053137876
110575
2040935080
677367690
25377155
1112859922
1087753090
827025838
975
20
781481263
68391561
1968304397
15873
375637
1674448103
1833427615
1230574
2047233596
35
3
42351
12259
464575317
357917960
456160326
828729
10
153486887
4102371
```

~ Continues next col ~

~ Continue previous col ~

```
657520840
1
1232526191
242051645
27
1278392136
1033994219
1029055
3297664
1346619954
1392775948
49138183
1287824190
12
38
3
375802274
6662481
1942533115
293915328
363762628
4
2
215565
594225405
15
1410319888
0
1726194844
29
1258347974
19
1256714118
341132276
796127423
1436071681
961151122
151812653
198957
2567334
1893255120
677840446
163251
593072831
503938656
```

~ Continues … ~

~ Input file contains 250001 lines of data, some lines very long – see martyn.dat file for complete input ~

~ Martyn continued ~

Test Output To Screen: (*indented lines are continuation of previous line*)

```
17
7, 50, 56, 60
None.
6, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53,
      54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64
2, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26,
      27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44,
      45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62,
      63, 64
None.
None.
33
None.
None.
None.
None.
None.
48
10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30,
      31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48,
      49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64
3, 9, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37,
      38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55,
      56, 57, 58, 59, 60, 61, 62, 63, 64
None.
3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24,
      25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,
      43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60,
      61, 62, 63, 64
3, 4, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28,
      29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46,
      47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64
14
50
33
10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30,
      31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48,
      49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64
None.
31
None.
56
4, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47,
      48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64
None.
31
5, 7, 11, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40,
      41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58,
      59, 60, 61, 62, 63, 64
None.
53
```

~ Output file contains 250000 lines of data, some lines very long – see martyn.out file for complete output ~

Problem #11
60 Points

11. Prachi

Program Name: Prachi.java **Input File: prachi.dat**

Test Input File:

```
12
5 4 1 1
####
#..#
####
#..#
####
6 6 1 4
###.##
#....#
###...
#..##.
#.##..
..#...
3 8 1 5
#..#.#..
..#...##
.#...#..
1 8 0 1
#..#..#.
2 2 0 0
..
..
2 2 0 0
.#
#.
8 8 3 2
...#..#.
.##...##
#..#.#..
...##...
##.....#
..#####.
....#...
...###..
10 10 5 4
##########
#..#.##..#
#....#...#
##..#..###
#.##.##..#
#.#...#..#
##...#..##
#...##...#
#.##...#.#
##########
```

~ continues next col ~

~ continue previous col ~

```
10 10 5 7
##########
#..#.##..#
#....#...#
##..#..###
#.##.##..#
#.#...#..#
##...#..##
#...##...#
#.##...#.#
##########
10 10 1 1
##########
#..#.##..#
#....#...#
##..#..###
#.##.##..#
#.#...#..#
##...#..##
#...##...#
#.##...#.#
##########
10 10 1 7
##########
#..#.##..#
#....#...#
##..#..###
#.##.##..#
#.#...#..#
##...#..##
#...##...#
#.##...#.#
##########
1 1 0 0
.
```

Test Output To Screen:

```
####
#$$#
####
#..#
####
###$##
#$$$$#
###$$$
#..##$
#.##$$
..#$$$
#..#$#..
..#$$$##
.#$$$#..
#$$#..#.
$$
$$
$#
#.
...#..#.
.##...##
#$$#.#$$
$$$##$$$
##$$$$$#
..#####.
....#...
...###..
```

~ continues next col ~

~ continue previous col ~

```
##########
#..#.##..#
#....#...#
##..#..###
#.##$##..#
#.#$$$#..#
##$$$#..##
#$$$##...#
#$##...#.#
##########
##########
#..#.##..#
#....#...#
##..#..###
#.##.##$$#
#.#...#$$#
##...#$$##
#...##$$$#
#.##$$$#$#
##########
##########
#$$#$##..#
#$$$$#...#
##$$#..###
#.##.##..#
#.#...#..#
##...#..##
#...##...#
#.##...#.#
##########
$
```

Problem #12
60 Points

12. Valery

Program Name: Valery.java **Input File: valery.dat**

Test Input File:

```
12
A 7
B C E G I K L
B 3
E I L
C 3
D I L
D 2
F L
E 2
F J
F 3
G H K
G 1
L
H 1
I
I 1
L
J 0
K 0
L 0
```

Test Output To Screen:

```
A->B->C->D->E->F->G->H->I->J->K->L
```