



UIL Computer Science Competition

2016 Invitational B

Programming Judges Packet

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Problem #1
60 Points

1. Adam

Test Input File:

```
1 2
2 1
14 -14
100 200
500 1000
10000 32767
100000 89
2147483647 -2147483648
```

Test Output To Screen

```
false
true
true
false
false
false
true
true
```

Problem #2

60 Points

Test Input File:
2 3 4 6 8 10

Test Output To Screen

[illegible]

2. Bartek

[illegible]

Problem #3
60 Points

3. Camila

Test Input File:

SMITH
SMYTH
CAMILA
WASHINGTON
ALLEN
JILLIANNE
PFISTER
JACKSON
ADAM
BARTEK
TYMCZAK
GUTIERREZ
DAIKI
LEE
EUI
FRANCISCO
GRACE
HE
IRINA
JORGE
KALYAN
LIPUN
BAILLEY
BROWN
MOSKOWITZ
MONAHAN
FITZSIMMONS

Test Output To Screen

S530
S530
C540
W252
A450
J450
P236
J250
A350
B632
T522
G362
D200
L000
E000
F652
G620
H000
I650
J620
K450
L150
B400
B650
M232
M550
F325

Problem #4
60 Points

4. Daiki

Test Input File:

Poop and Pee Plushies,brown,120,2
H-Bouya USB Toy,blue,25,1
Face Bank,red,200,4
Virus Plush,yellow,60,3
Road Kill Cat,white,120,5
Baby Shave,beige,120,9
Rubber Lips,red,200,5
Russian Roulette Toy Gun,red,200,6
Japanese Pregnant Doll,beige,400,10
Baby Microwave,beige,120,9

Test Output To Screen

Japanese Pregnant Doll
Russian Roulette Toy Gun
Rubber Lips
Face Bank
Baby Microwave
Baby Shave
Poop and Pee Plushies
Road Kill Cat
Virus Plush
H-Bouya USB Toy

Problem #5
60 Points

5. Eun-suh

Test Input File:

3580254
830751
550604
135860
2040114
00050114
52365
0135752

Test Output To Screen

6
10
4
1
4
4
9
11

UIL

Problem #7
60 Points

7. Grace

Test Input File:

```
9
10
11
1000
10000
9999
9998
```

Test Output To Screen

```
81.0
3.2
2.2
31.6
100.0
99980001.0
21.5
```


Problem #8
60 Points

8. Huang

Test Input File:

BAMBOO 5
BLOODWOOD 7
CEDAR 9
PINE 3
HICKORY 19
MAPLE 11
MAHOGANY 7
HACKBERRY 3

Test Output To Screen

BAMBO
BOOBO
MO*AB
AOBMA
BOOBM

BLOODWO
WOODBLO
DODWOOD
OOO*OOB
OLLBDDL
LBDOOWO
BDOOWDO

CEDARCEDA
EDARCEDAR
CCEDARCRC
RREDARECE
AACR*CEDE
DDRDEADA
EEADECRAR
CCRADECRC
RADECRADE

PIN
E*E
NIP

HICKORYHICKORYHICKO
ICKORYHICKORYHICKOR
HCKORYHICKORYHICKRY
YICKORYHICKORYHIOYH
RHIICKORYHICKORCRHI
OYHHYHICKORYHIYKYIC
KRYRKHICKORYHICKCHOCK
CORROCYHICKOOKIRIKO

IKOOKIRICKORROCYCOR
HCKKCHOHC*RYRKHKRY
YICCIYKYIHYHHYOIOYH
RHIIHRCROKCIHRCRHI
OYHHYOIHYROKCIYKYIC
KRYRKHICKORYHICKCHOCK
CORROKCIHYROKCIIRIKO
IKOOKCIHYROKCIHYCOR
HCKCIHYROKCIHYROKRY
YIHYROKCIHYROKCIHYH
ROKCIHYROKCIHYROKCI

MAPLEMAPLEM
EMAPLEMAPLA
LAPLEMAPLEP
PMMAPLEMEML
AEEAPLEAMAE
MLLME*MPAPM
EPPELPALPLA
LAALPAMELEP
PMMELPAMEML
AELPAMELPAE
MELPAMELPAM

MAHOGAN
YMAHOGY
NYMAHAM
ANY*ONA
GANAGYH
OGOHAMO
HAMYNAG

HAC
R*K
REB

Problem #9
60 Points

9. Irina

Test Input File:

```
10
3
40 DOLLARS
15 DIMES
4 DOLLARS
10
15 DIMES
4 DOLLARS
300 PENNIES
7 DOLLARS
5 QUARTERS
45 QUARTERS
40 NICKELS
40 PENNIES
35 NICKELS
20 QUARTERS
5
20 QUARTERS
26 DIMES
11 NICKELS
11 DIMES
12 NICKELS
5
25 QUARTERS
25 DIMES
15 NICKELS
15 DIMES
17 NICKELS
7
10 PENNIES
11 PENNIES
12 PENNIES
13 PENNIES
14 PENNIES
15 PENNIES
16 PENNIES
5
5 PENNIES
5 DIMES
5 QUARTERS
5 NICKELS
5 DOLLARS
6
50 PENNIES
50 DIMES
50 QUARTERS
50 NICKELS
50 DOLLARS
1 PENNIES
10
15 QUARTERS
45 DOLLARS
45 DIMES
5 DOLLARS
```

```
5 QUARTERS
45 QUARTERS
40 NICKELS
40 PENNIES
35 NICKELS
20 QUARTERS
10
43 QUARTERS
44 DIMES
45 DIMES
1 DOLLARS
5 QUARTERS
45 QUARTERS
40 NICKELS
40 PENNIES
35 NICKELS
20 QUARTERS
1
20 PENNIES
```

Test Output To Screen

```
GRAB THE 40 KG BAG OF DOLLARS
GRAB THE 4 KG BAG OF DOLLARS

GRAB THE 20 KG BAG OF QUARTERS
GRAB THE 7 KG BAG OF DOLLARS
GRAB THE 5 KG BAG OF QUARTERS
GRAB THE 4 KG BAG OF DOLLARS

GRAB THE 26 KG BAG OF DIMES
GRAB THE 11 KG BAG OF DIMES

GRAB THE 25 KG BAG OF QUARTERS
GRAB THE 15 KG BAG OF DIMES

GRAB THE 16 KG BAG OF PENNIES
GRAB THE 15 KG BAG OF PENNIES
GRAB THE 14 KG BAG OF PENNIES

GRAB THE 5 KG BAG OF DOLLARS
GRAB THE 5 KG BAG OF QUARTERS
GRAB THE 5 KG BAG OF DIMES
GRAB THE 5 KG BAG OF NICKELS
GRAB THE 5 KG BAG OF PENNIES

GRAB THE 1 KG BAG OF PENNIES

GRAB THE 45 KG BAG OF DOLLARS

GRAB THE 44 KG BAG OF DIMES
GRAB THE 1 KG BAG OF DOLLARS

GRAB THE 20 KG BAG OF PENNIES
```

Problem #10
60 Points

10. Jorge

Test Input File:

```
18 44 7 21 23
18 44 31 22 38
18 44 31 34 21
18 44 31 5 9
32 45 8 22 50
32 46 8 22 50
8 21 36 51 47
28 30 33 36 39
4 17 32 23 36
20 3 17 31 45
```

Test Output To Screen

```
PAIR
THREE OF A KIND
FULL HOUSE
FOUR OF A KIND
PAIR
NONE
THREE OF A KIND
FLUSH
TWO PAIRS
STRAIGHT
```

Problem #11
60 Points

11. Kalyani

Test Input File:

```
4
2.365
3
1.3 4.5 8.340
3.6 7.5 4.23
3.5 5.0 6.87
8.0
5
0.0 3.4 6.0
0.0 2.5 4.0
5.5 6.5 2.0
7.8 10.0 1.0
7.2 7.4 5.0
3.14159265
2
3.4 6.6 2.14
9.0 10.0 0.000
9.999
0
```

Test Output To Screen

```
0.0 1.2 2.365
1.3 3.4 8.340
3.5 4.9 6.87
5.0 7.4 4.23
7.5 9.9 2.365

0.0 2.4 4.0
2.5 3.3 6.0
3.4 5.4 8.0
5.5 6.4 2.0
6.5 7.1 8.0
7.2 7.3 5.0
7.4 7.7 8.0
7.8 9.9 1.0

0.0 3.3 3.14159265
3.4 6.5 2.14
6.6 8.9 3.14159265
9.0 9.9 0.000

0.0 9.9 9.999
```

Problem #12
60 Points

12. Lipun

Test Input File:

```
INVITATIONAL
UIL
DISTRICT
REGION
STATE
CHAMPION
TEAM
PROGRAMMINGCONTESTSAREFUN
```

Test Output To Screen

```
5 4 13 29 53
2 1 4 3 9
4 4 9 16 32
5 1 7 15 27
2 2 6 6 16
5 3 9 19 35
2 2 5 5 13
7 10 26 93 143
```