
**FLORIDA HIGH SCHOOLS COMPUTING COMPETITION '96
JUDGING CRITERIA**

- 1.1 INPUT: Enter year: 1992
OUTPUT: **FHSCC '92**
- INPUT: Enter year: 1980
OUTPUT: **FHSCC '80**
- 1.2 INPUT: Enter X: 10
Enter Y: 100
OUTPUT: **31500**
- INPUT: Enter X: 5
Enter Y: 60
OUTPUT: **15800**
- 1.3 INPUT: Enter word: **FLORIDA**
OUTPUT: **R**
- INPUT: Enter word: **COMPUTER**
OUTPUT: **PU**
- INPUT: Enter word: **COMPETITION**
OUTPUT: **T**
- 1.4 INPUT: Enter coordinate 1: 1, -5
Enter coordinate 2: -5, -2
OUTPUT: **AREA = 18**
PERIMETER = 18
- INPUT: Enter coordinate 1: -3, 1
Enter coordinate 2: 0, 12
OUTPUT: **AREA = 33**
PERIMETER = 28
- 1.5 INPUT: Enter encryption: **GSV NBHGVIB GSZG LMXV DZH SRWWVM**
OUTPUT: **THE MYSTERY THAT ONCE WAS HIDDEN**
- INPUT: Enter encryption: **UILN ZTVH GL TVMVIZGRLMH**
OUTPUT: **FROM AGES TO GENERATIONS**

1.6 INPUT: Enter floor: 5
Enter floor: 7
Enter floor: 4
Enter floor: 18
Enter floor: 3
Enter floor: 0

OUTPUT: TOTAL FLOORS TOUCHED = 43
UNIQUE FLOORS TOUCHED = 19

INPUT: Enter floor: 26
Enter floor: 10
Enter floor: 1
Enter floor: 0

OUTPUT: TOTAL FLOORS TOUCHED = 53
UNIQUE FLOORS TOUCHED = 27

1.7 INPUT: Enter amount of loan: 398
Enter amount of debts: 500
Enter amount of income: 1230

OUTPUT: RATIOS = 32.4% / 73.0%
DOES NOT QUALIFY

INPUT: Enter amount of loan: 1100
Enter amount of debts: 150
Enter amount of income: 3300

OUTPUT: RATIOS = 33.3% / 37.9%
DOES NOT QUALIFY

INPUT: Enter amount of loan: 800
Enter amount of debts: 200
Enter amount of income: 3000

OUTPUT: RATIOS = 26.7% / 33.3%
DOES QUALIFY

1.8 INPUT: Enter E or S: **E**
Enter number: 7
OUTPUT: **SEVEN**

INPUT: Enter E or S: **S**
Enter number: 8
OUTPUT: **OCHO**

INPUT: Enter E or S: **S**
Enter number: 1
OUTPUT: **UNO**

INPUT: Enter E or S: **E**
Enter number: 3
OUTPUT: **THREE**

1.9 INPUT: Enter word(s): **HIGH SCHOOL**
OUTPUT:

H
I
G
H

HIGH SCHOOL

C
H
O
O
L

INPUT: Enter word(s): **DOG**
OUTPUT: **D**
DOG
G

1.10 INPUT: Enter actual price: **600**
Enter guesses A, B, C, D: **300, 400, 500, 200**
OUTPUT: **PERSON C**

INPUT: Enter actual price: **399**
Enter guesses A, B, C, D: **600, 500, 400, 300**
OUTPUT: **PERSON D**

INPUT: Enter actual price: **300**
Enter guesses A, B, C, D: **301, 402, 503, 604**
OUTPUT: **EVERYONE IS OVER**

INPUT: Enter actual price: **425**
Enter guesses A, B, C, D: **425, 500, 400, 300**
OUTPUT: **PERSON A**

2.1 RUN PROGRAM:

(The program will emulate random dart throws. The dart scores possible are 0,2,4,5,10,20,50 with the probability of hitting any score being the same as any other. The object of the game is to accumulate a score of at least 100 points. The program will print the score of each dart throw, separated by a comma, until the sum of the scores totals 100 points or more. The program must then print the number of throws that achieved the score, followed by the total score achieved.)

- Ensure that all dart scores are only 0,2,4,5,10,20, or 50
- Ensure that the # of throws equals the # of scores shown above it
- Ensure that the final score is at least 100, and that the difference between the score and the last dart throw score is less than 100
- Ensure that the program "appears" random by running it several times

Sample RANDOM runs:

OUTPUT: 2,4,20,4,10,0,5,20,4,2,50
11 THROWS ACHIEVED SCORE OF 121

OUTPUT: 50,20,10,5,10,2,5
7 THROWS ACHIEVED SCORE OF 102

2.2 INPUT: Enter string: **FLORIDA*HIGH**SCHOOLS***COMPUTING**
OUTPUT: **FLORIDA*HIGH2SCHOOLS3COMPUTING**

INPUT: Enter string: **COMPETITION*****FOR*****THIS*YEAR**
OUTPUT: **COMPETITION7FOR5THIS*YEAR**

2.3 RUN PROGRAM:

OUTPUT: **0**
120

2.4 INPUT: Enter N: **10**
OUTPUT: **2520**

INPUT: Enter N: **28**
OUTPUT: **80313433200**

2.5 INPUT: Enter word: **FUN**
OUTPUT: **2/7**

INPUT: Enter word: **BAT**
OUTPUT: **31/20**

2.6 INPUT: Enter N: 7
OUTPUT: 1597

INPUT: Enter N: 8
OUTPUT: 28657

2.7 INPUT: Enter phone #, zip: 1796, 33647
Enter phone #, zip: 1521, 33555
Enter phone #, zip: 2001, 33647
Enter phone #, zip: 1400, 33647
Enter phone #, zip: 1621, 33555
Enter phone #, zip: 1555, 33647
Enter phone #, zip: 0000, 00000

OUTPUT: 1521
1621
1400
1555
1796
2001

INPUT: Enter phone #, zip: 3000, 33444
Enter phone #, zip: 2000, 33555
Enter phone #, zip: 2001, 33222
Enter phone #, zip: 1000, 33444
Enter phone #, zip: 4000, 33555
Enter phone #, zip: 0000, 00000

OUTPUT: 2001
1000
3000
2000
4000

2.8 INPUT: Enter letters: YETRULYTHEBIBLEISGODSWORD
OUTPUT: RUNS IN 1ST HALF = 6
RUNS IN 2ND HALF = 6

INPUT: Enter letters: LORDJESUSISGODSSON
OUTPUT: RUNS IN 1ST HALF = 5
RUNS IN 2ND HALF = 5

2.9 INPUT: Enter string: WHAT DOES SIMIS MEAN
OUTPUT: TAHW SEOD ????? NAEM

INPUT: Enter string: OTTO GAVE A TOOT TO TOTO
OUTPUT: ????? EVAG ? ????? OT OTOT

2.10 INPUT: Enter month, day, year: 2, 29, 1992
OUTPUT: **SATURDAY**

INPUT: Enter month, day, year: 10, 16, 1966
OUTPUT: **SUNDAY**

INPUT: Enter month, day, year: 2, 1, 1799
OUTPUT: **FRIDAY**

INPUT: Enter month, day, year: 1, 1, 2100
OUTPUT: **FRIDAY**

3.1 INPUT: Enter title 1: **THE HAPPIEST**
 Enter title 2: **PEOPLE ON EARTH**

OUTPUT: (Screen clears, left side in column 1, top in row 1)

```

      /---/!
     /   /!
    /---/!
   !P !  !
  !E T!  !
 !O H!  !
!P E!  !
!L !   !
!E H!  !
! A!   !
!O P!  !
!N P!  !
! I!   !
!E E!  !
!A S!  !
!R T!  !
!T !   !
!H !   !
!---!/
  
```

INPUT: Enter title 1: **MORE THAN A**
 Enter title 2: **CARPENTER**

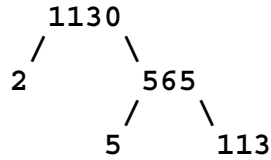
OUTPUT: (Screen clears, left side in column 1, top in row 1)

```

      /---/!
     /   /!
    /---/!
   ! M!  !
  !C O!  !
 !A R!  !
!R E!  !
!P !   !
!E T!  !
!N H!  !
!T A!  !
!E N!  !
!R !   !
! A!   !
!---!/
  
```

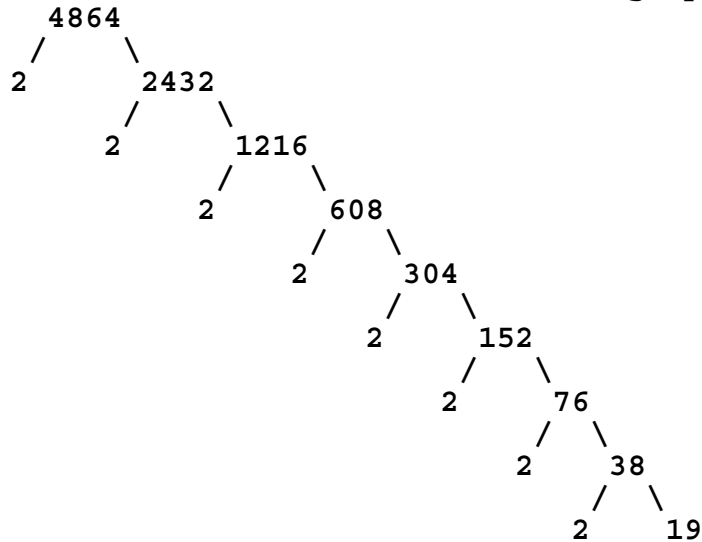
3.2 INPUT: Enter number: 1130

OUTPUT: (Screen is cleared, and the following appears)



INPUT: Enter number: 4864

OUTPUT: (Screen is cleared, and the following appears)



3.3 INPUT: Enter base 4 expression: 1230-23+3210+123-10

OUTPUT: 11130

INPUT: Enter base 4 expression: 12321-32101-21012+12321

OUTPUT: -21211

3.4 INPUT: Enter pay/hour: 15.00
 Enter start time: 01:30AM
 Enter finish time: 12:10PM
 OUTPUT: \$176.00

INPUT: Enter pay/hour: 20.00
 Enter start time: 12:55PM
 Enter finish time: 12:25AM
 OUTPUT: \$253.00

INPUT: Enter pay/hour: 30.00
 Enter start time: 06:00AM
 Enter finish time: 05:25PM
 OUTPUT: \$342.50

3.5 INPUT: Enter row: 1D 3D 2L 2L
 Enter row: 2R 1D 1L 1U
 Enter row: 1D 1R 1R 0F
 Enter row: 3R 1R 3U 2U
 OUTPUT: **FIRST BUTTON = 1D**
AT ROW = 3, COL = 1

INPUT: Enter row: 2R 2R 2D 0F
 Enter row: 1U 1U 1L 3L
 Enter row: 1R 1D 1R 3L
 Enter row: 3R 1R 2U 2U
 OUTPUT: **FIRST BUTTON = 3R**
AT ROW = 4, COL = 1

3.6 INPUT: Enter order, first number, increment: 5, 9, 10
 OUTPUT: **MAGIC NUMBER = 645**
 169 239 9 79 149
 229 49 69 139 159
 39 59 129 199 219
 99 119 189 209 29
 109 179 249 19 89

INPUT: Enter order, first number, increment: 7, 89, 2
 OUTPUT: **MAGIC NUMBER = 959**
 147 165 183 89 107 125 143
 163 181 101 105 123 141 145
 179 99 103 121 139 157 161
 97 115 119 137 155 159 177
 113 117 135 153 171 175 95
 129 133 151 169 173 93 111
 131 149 167 185 91 109 127

3.7 INPUT: Enter first number, increment: 2, 1
 OUTPUT: **MAGIC NUMBER = 117**
 36 2 7 27 20 25
 4 33 8 22 24 26
 32 10 3 23 28 21
 9 29 34 18 11 16
 31 6 35 13 15 17
 5 37 30 14 19 12

INPUT: Enter first number, increment: 10, 25
 OUTPUT: **MAGIC NUMBER = 2685**
 860 10 135 635 460 585
 60 785 160 510 560 610
 760 210 35 535 660 485
 185 685 810 410 235 360
 735 110 835 285 335 385
 85 885 710 310 435 260

3.9 INPUT: Enter number of dependencies: 5

Enter dependency: PF PI

Enter dependency: PA PF

Enter dependency: PF PP

Enter dependency: PI PP

Enter dependency: PA PI

OUTPUT: JOBS MUST BE RUN IN THIS ORDER: PA PF PI PP

INPUT: Enter number of dependencies: 8

Enter dependency: VS VD

Enter dependency: V8 VI

Enter dependency: VD VI

Enter dependency: VA V7

Enter dependency: V8 VS

Enter dependency: V7 V8

Enter dependency: VA VS

Enter dependency: V7 VD

OUTPUT: JOBS MUST BE RUN IN THIS ORDER: VA V7 V8 VS VD VI

3.10 RUN PROGRAM:

OUTPUT: 523814769 IS THE SQUARE OF 22887
AND WAS FORMED BY EXCHANGING 3 PAIRS OF DIGITS