



ΠΑΝΕΛΛΑΔΙΚΕΣ ΕΞΕΤΑΣΕΙΣ
Γ' ΤΑΞΗ ΗΜΕΡΗΣΙΟΥ ΓΕΝΙΚΟΥ ΛΥΚΕΙΟΥ
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ΕΞΕΤΑΖΟΜΕΝΟ ΜΑΘΗΜΑ:
ΠΡΟΓΡΑΜΜΑΤΙΣΜΟΣ ΥΠΟΛΟΓΙΣΤΩΝ

(Ενδεικτικές Απαντήσεις)

ΘΕΜΑ Α

A1. α-ΣΩΣΤΟ β-ΣΩΣΤΟ γ-ΛΑΘΟΣ δ-ΣΩΣΤΟ ε-ΛΑΘΟΣ

A2. 1-δ 2-α 3-ε 4-στ 5-β

ΘΕΜΑ Β

B1. α) εμφανίζονται στην οθόνη οι τιμές: 1,2,3,4,5,6

β)

```
for x in range(1,7):  
    print x
```

(εναλλακτικά)

```
for x in range(6):  
    print x+1
```

B2.

```
AR = [2]
```

```
for i in range(1,10):
```

```
    x = 2 * AR[i-1]
```

```
    AR.append(x)
```

B3.

a) `pow(2,3) == 5+3`

`8 == 8`

`True`

b) `2 == 5 or not(3>2)`

`False or not True`

`False or False`

`False`

c) `13%15 == 3 + 4 *2`

`13 == 11`

`False`

ΘΕΜΑ Γ

```
def TYPOS_EMB(age):
```

```
    if age <= 50:
```

```
        typos = 1
```

```
    elif age <= 60:
```

```

        typos = 2
elif age <= 70Q
        typos = 3
else:
        typos = 4

return typos

max = -1
plOLWN = 0
plG = 0
age = input("dose tin hlikia")
while (age < 40):
    fylo = raw_input("dose to fylo")
    if fylo != "A" and fylo != "G":
        fylo = raw_input("dose to fylo")
    amka = raw_input("dose ton AMKA")

    t = TYPOS_EMB(age)

    print "o asfalismenos me AMKA", amka, "exei typo envoliou me
arithmo",t

if age > max:
    max = age
    maxF = fylo
    maxAMKA = amka

```

```
plOLWN = plOLWN + 1
```

```
if fylo == "G":
```

```
    plG = plG + 1
```

```
age = input("dose tin hlikia")
```

```
pososto = plG/plOLWN*100
```

```
print pososto
```

```
print maxF,maxAMKA
```

ΘΕΜΑ Δ

```
OMADES = []
```

```
BATHMOI = []
```

```
for I in range(100):
```

```
    omada = raw_input("dose to onoma tis omadas")
```

```
    OMADES.append(onoma)
```

```
    vathm = input("dose tin vathmologia tis omadas")
```

```
    BATMHOI.append(vathm)
```

```
PROK = []
```

```
BATHPROK = []
```

```
for I in range(100):
```

```
    if BATHMOI[i] > 150:
```

```
        PROK.append(OMADES[i])
```

```
        BATHPROK.append(BATHMOI[i])
```

```

N=len(PROK)
for i in range(N-1):
    for j in range(N-1,i,-1):
        if BATHPROK[j] > BATHPROK[j-1]:
            PROK[j],PROK[j-1] = PROK[j-1],PROK[j-1]
            BATHPROK[j],BATHPROK[j-1] = BATHPROK[j-1],BATHPROK[j]
        elif BATHPROK[j] == BATHPROK[j-1]:
            if PROK[j] < PROK[j-1]:
                PROK[j],PROK[j-1] = PROK[j-1],PROK[j-1]

count = 0
for i in range(N):
    if BATHPROK[i] == BATHPROK[0]:
        count = count + 1

```