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Question 1

We chose an expression through the process of elimination. It was not a name in the math module, a variable or an operator

Question 2:

We knew that a variable is something that stores a value, so variable is the answer

Question 3

We all had different answers for this one, but after checking the book confirmed the answer was interpreted

Question 4

We googled what a namespace is and figured out that it was either A list of acceptable names to use within a Python program Or *a list of Python names and the values with which they are associated*.

Question 5

We used math $b = a + (b-1)$ and all got the same answer

Question 6

We had a basic understanding of types in python and all knew the answer. Bjarni made a short explanation and everyone agreed.

Question 7

Some had 11 some had 21. Those of us with experience in python knew that python does multiplication first, and then sums. We explained this to the rest and agreed on the answer.

Question 8

We were unsure between answer A and C, some of us knew that python puts .0 behind all floats, we explained and everyone agreed on C.

Question 9

We figured it out through a process of elimination. Import is not a string because its a variable, you can't call a variable

Question 10

Bjarni explained what exponentiation, quotient and remainder to everybody and how it works.

Kattis:

B, BergMál:

Problem - William:

Since Bergur's programs are very troubling to read because everything is on a single line, it is best to create an input line to separate what the keylogger sent and to rewrite Bergur's code with it.

Solution - Ólafur: Mjög illa skrifuð spurning en loksins tókst eftir hjálp frá Hauki.

```
text = input()
print(text)
```

C, Tölvunarfræðingar telja:

Problem - Ólafur:

Forrit byrja að telja á númer 0, meðan við byrjum á 1. Til að setja inn input af tölu, t.d. 3 og fáum sem output töluna 2 þá myndi ég skrifa code í Python þar sem input number væri mínusað um 1.

Solution - Snorri:

The first line was an integer input, the second line I told python to print the input -1

```
1 tala = int(input("Skrifaðu tölu "))
2 print(tala - 1)
```

D, The Cube:

Problem - Yeabsira:

The cube of a number is obtained by multiplying that number by itself twice. If we consider the number as 'n' then the cube of n is $n*n*n$ and is represented as n^3 . We are given a number and we have to find its cube value.

Example:

Input: 5

Output: 125

Explanation: `5 * 5 * 5 = 125`

Solution - William:

The first line defined integer as "n", then gave the result as `n**3` which cubes whatever integer I would input into "n" and then return the result. Then to print the integer you would convert it with `int(input())`.

Files submitted

Mainfile: `cube.py`

cube.py

```
1 def integer(n):
2     result = n**3
3     return result
4
5 print(integer(int(input())))
```

I, Amerískur Vinnustaður:

Problem - Snorri:

I start with an float input line and write "The length of the road in football fields "

I then create a print line and put in the given equation $n(1 \leq n \leq 10^5)$ with n being the input.

Solution - Yeabsira:

```
n = int(input("Enter the length of the road in football fields: "))
football_field_to_km = 0.09144
length_in_km = n * football_field_to_km
print(f"{length_in_km:.6f}")
```

H, Computer, compute!:

Problem - Bjarni:

In the top line I would import math so I could take the square root of a number. I would then use 4 inputs to take in x1, y1, x2 and y2 and calculate the difference between the x2 and x1 and put it into the power of 2, and do the same with the y2 and y1. I would then add those numbers together and take the square root of them to have the answer in a float type. I would then finally print it using the `{:0.15f}'.format(answer)` solution to get the decimal point afterwards.

Solution - Haukur:

```
import math
```

```
x1 = int(input())
y1 = int(input())
x2 = int(input())
y2 = int(input())

d = math.sqrt((x2-x1)**2 + (y2 - y1)**2)

print(d)
```

L, Another Dimension:

Problem - Haukur:

I start by importing the math module so I can use py in my calculations. Then I create the variable “d” of type float. I then set the value of “d” through input from the player. Finally I calculate the volume of the half sphere using the value given by the user.

Solution - Bjarni:

I took in the input that is the diameter and divided it by half to get the radius, after that I did like the description above but I then divided the number by half to get the volume of the half-sphere. I then used the `{:0.15f}'.format(halfVolume)` to print out the answer with 15 decimal points. Although I now realize that the error rate was of 10^{-9} not the number of decimal points that were required.

```
1 import math
2
3 d = float(input())
4 r = d / 2
5
6 Volume = (4/3) * math.pi * (r ** 3)
7
8 halfVolume = Volume / 2
9
10 print('{:0.15f}'.format(halfVolume))
11
```