

PF Assignment

6-10-2021

Answer no. 1

a) Integer

→ age is in whole numbers `int age = 12;`

b) long integer

Speed of light has 9 digits `long int C = 3 × 108;`

c) Char

gender is M or F → Single character `Char g = M;`

d) float

coordinates are in decimals `float x = (2.1, 2.4)`

e) Integer

factorial gives digits.

f) Integer

we are talking in digits.

g) float

mass of electron is in decimal

a) If d is a float, then the operation $d = 2/7$ would store 0.285

$$\begin{array}{r} 0.285 \\ 7 \overline{) 20} \\ \underline{-14} \\ 60 \\ \underline{-56} \\ 40 \\ \underline{-35} \\ 50 \\ \underline{-49} \\ 10 \\ \underline{-7} \\ 30 \\ \underline{-28} \\ 20 \\ \underline{-14} \\ 60 \\ \underline{-56} \\ 40 \\ \underline{-35} \\ 50 \\ \underline{-49} \\ 10 \\ \underline{-7} \\ 30 \\ \underline{-28} \\ 20 \end{array}$$

b) $x = -7 \% 2 - 8$ $-7 \% 2 = -1$
 $x = -9$ $-1 - 8 = -9$

c) $c = 0 \ 5 \&\& c != 8 || !c$
 $\text{true} = 1 \text{ Am.}$

d) $a = b = c = 3 + 4$
 $a = 7, b = 7, c = 7$

e) $y = z = -3 \% -8 / 2 + 7$
 $y =$ $-8 / 2 = -4$
 $-3 \% -4 = -1$
 $-1 + 7 = 6$ $-3 + 7$

Predict $\boxed{\therefore Y = 6}$ $\rightarrow \boxed{Y = 4}$

Problem 4:

Step 1: Input four digit positive integer

Step 2: If integer is more than four digit or less than 0

Step 3: Go back to Step 1 else Step 4

Step 4: Enter last character of your roll number

Step 5: Check how many times it is repeated.

Step 6: Display repetition number.

Problem no. 7

- Step 1: Enter the coordinates of $x_1, x_2, x_3, x_4, y_1, y_2, y_3, y_4$.
- Step 2: Find slope of all four points using gradient formula.
- Step 3: If slope of 3 points match
- Step 4: Print "they are collinear"
- Step 5: If they not match
- Step 6: Print they are not collinear.

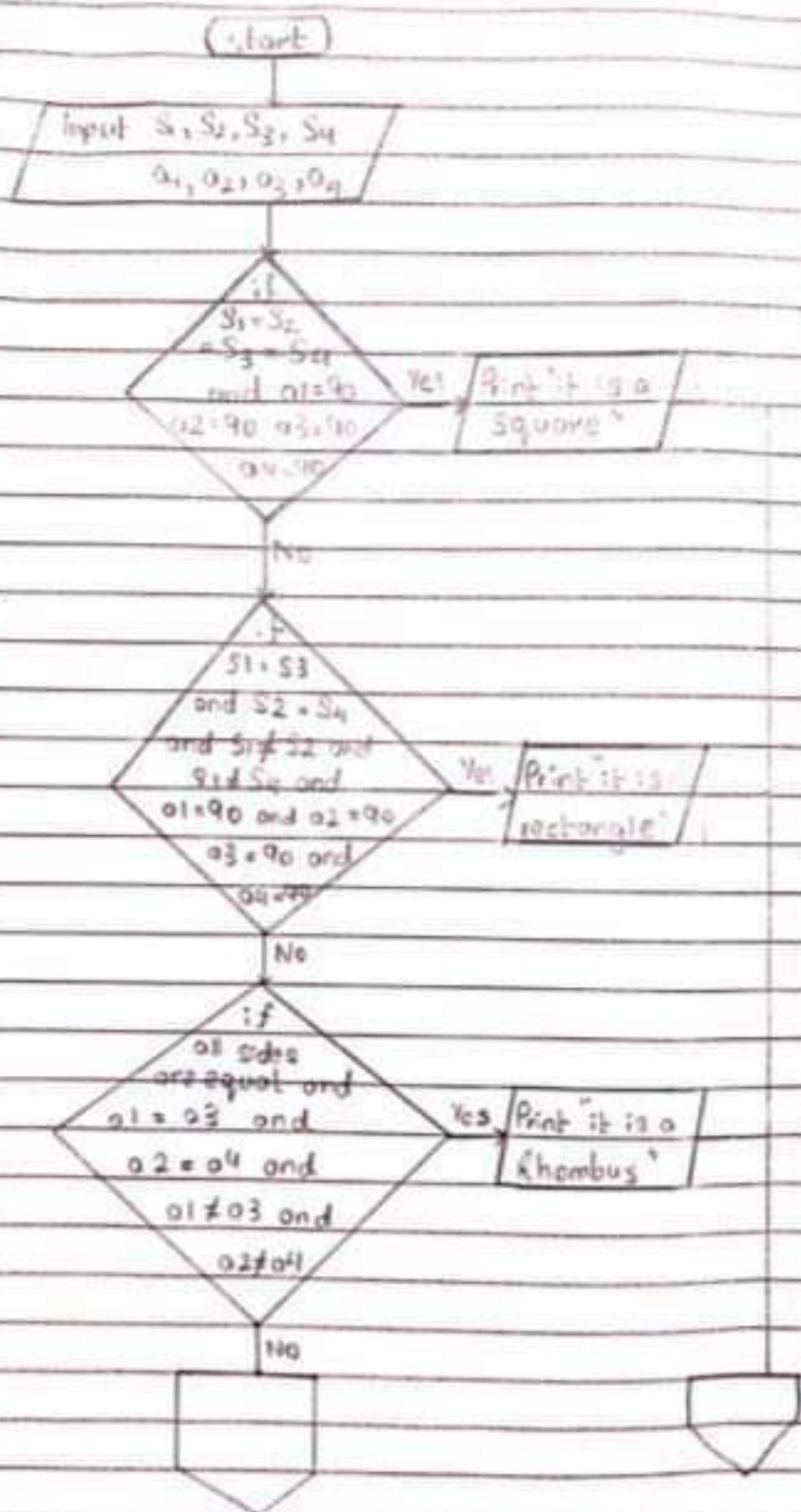
Problem no. 9

- Step 1: Enter last 2 digits of your Roll-number
- Step 2: If digits entered are more than 2.
- Step 3: Print error. go back to Step 1 else Step 4
- Step 4: Convert number into its binary equivalent.
- Step 5: Convert binary back into decimal.
- Step 6: If result is right prompt message 'correct'.

Problem no. 5

No.	Output
a)	$x = 1$ $w = 1$ $y = 1$ $y = 0$ $x = 0$ $z = 1$
b)	$k = 0$ $a = 0.000000$ $l = 2$ $b = 2.000000$
c)	$a = 1$ $b = 0.000000$

* Problem 3 *



Date _____

