

PROBLEM 1:

Date _____ 20 _____

Item	Data type	Justification.
a) Age of a person (in years)	float.	Age of a person can be sum of whole year and half for example 2.5 years. For decimal values we use float.
b) Speed of light.	Integer . Int.	Speed of light is a whole number integer. Integer values are stored in 'int'.
c) Gender:	- char : - string :	Gender will be char if we take F/M. Gender will be string if we take male / female.
d) Coordinates of a point	float.	Coordinates may be written as (2.5) decimal values which are stored in float.
e) Factorial of a number.	int	Since factorial of a number is always a whole number its data type is int.

nice

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8)

number of plants
in a region.

int

Number of plants is an whole
number.

9) Mass of an
electron.

float ✓

Mass of an electron is a decimal
value so it is stored in.

Question 2C . 1 (True)

Bcz Both are True .

$$588 \div 1 = 8 \quad (\text{True}) .$$

$$588 .$$

2d)

$$2d) \quad a = b = c = 7$$

$$a = 7, \quad b = 7 \quad c = 7$$

because $a = b$ and $b = c$ and $c = 7$

2e)

$$y = 2 = -3\% - 8 / 2 + 7$$

$$= -8 - 2 / 2 + 7$$

$$= 2 / 2 + 7 = -8 .$$

$$y = 8, \quad z = 8$$

Question-5

a) $w = 1$ $x = 1$ $y = 1$ $z = 1$

- Explanation :- $w, 1$ because i, j is non zero term and anything which is non-zero is True. $\&\&$ or operate if any one condition is True then it is True. (1).

b) Output: 0.2 0.000 2.000

 k is zero because k is in datatype 'integer'. l is 2 because l is in datatype integer.

a and b have same answer as as k, l a and b have are in datatype float that's they have a decimal and number have do -

c) Error :

we have declare n in int- but in answer out is taken as float in $\%f$ that's why the output will be 0.000 which is incorrect.

d) $x = 0$ It is zero because it has $\&\&$ operated if all are true then it is true.

$y = 1$ because OR operator is first and $\&\&$ is then.

$z = 0$ $\&\&$ operator is first and OR operator is then.

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