

DATA SCIENCE & ARTIFICIAL INTELLIGENCE (BATCH -02)

ASSIGNMENT NO # 02

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04613

Solve the following.

• $30 \div 5 \times 2 + 1$

Solution:

$$= 30/5 \times 2 + 1$$

$$= 6 \times 2 + 1$$

$$= 12 + 1$$

$$= 13$$

• $5 + (4 - 2)^2 \times 3 \div 6 - 1$

Solution:

$$= 5 + (4 - 2)^2 \times 3 / 6 - 1$$

$$= 5 + (2)^2 \times 3 / 6 - 1$$

$$= 5 + 2^2 \times 3 / 6 - 1$$

$$= 5 + 4 \times 3 / 6 - 1$$

$$= 5 + 12 / 6 - 1$$

$$= 5 + 2 - 1$$

$$= 7 - 1$$

$$= 6$$

• $3^2 + [6 (11 + 1 - 4)] \div 8 \times 2$

Solution:

$$= 3^2 + [6 \times (11 + 1 - 4)] / 8 \times 2$$

$$= 3^2 + [6 \times (12 - 4)] / 8 \times 2$$

$$= 3^2 + [6 \times (8)] / 8 \times 2$$

$$= 3^2 + [6 \times 8] / 8 \times 2$$

$$= 3^2 + [48] / 8 \times 2$$

$$= 3^2 + 48 / 8 \times 2$$

$$= 9 + 48 / 8 \times 2$$

$$= 9 + 6 \times 2$$

$$= 9 + 12$$

$$= 21$$

- $10 \div 2 + 12 \div 2 \times 3$

Solution:

$$= 10/2 + 12/2 \times 3$$

$$= 5 + 12/2 \times 3$$

$$= 5 + 6 \times 3$$

$$= 5 + 18$$

$$= 23$$

- $20 - [3 \times (2 + 4)]$

Solution:

$$= 20 - [3 \times (2 + 4)]$$

$$= 20 - [3 \times (6)]$$

$$= 20 - [3 \times 6]$$

$$= 20 - [18]$$

$$= 20 - 18$$

$$= 2$$

- $150 \div (6 + 3 \times 8) - 5$

Solution:

$$= 150 / (6 + 3 \times 8) - 5$$

$$= 150 / (6 + 24) - 5$$

$$= 150 / (30) - 5$$

$$= 150 / 30 - 5$$

$$= 5 - 5$$

$$= 0$$

- $- \{2y - [3 - (4 - 3y)] + 6y\}$ (Hint: $y = 3$)

Solution:

$$= -\{2 \times 3 - [3 - (4 - 3 \times 3)] + 6 \times 3\}$$

$$= -\{2 \times 3 - [3 - (4 - 9)] + 6 \times 3\}$$

$$= -\{2 \times 3 - [3 - (-5)] + 6 \times 3\}$$

$$= -\{2 \times 3 - [3 + 5] + 6 \times 3\}$$

$$= -(2*3-[8]+6*3)$$

$$= -(2*3-8+6*3)$$

$$= -(6-8+6*3)$$

$$= -(6-8+18)$$

$$= -(-2+18)$$

$$= -(16)$$

$$= -16$$

- $14z + 5[6 - (2z + 3)]$ (Hint $z = 2$)

Solution:

$$= 14*2+5*[6-(2*2+3)]$$

$$= 14*2+5*[6-(4+3)]$$

$$= 14*2+5*[6-(7)]$$

$$= 14*2+5*[6-7]$$

$$= 14*2+5*[-1]$$

$$= 14*2-5$$

$$= 28-5$$

$$= 23$$

```
In [26]: print(30 / 5 * 2 + 1 )
print(5 + (4 - 2)**2 * 3 / 6 - 1 )
print(3**2 + (6 *(11 + 1-4)) / 8 * 2)
print(10 / 2 + 12 / 2 * 3)
print(20 - (3 * (2 + 4)))
print(150 / (6 + 3 * 8) - 5)
y=3
print(-(2*y-(3-(4-3*y))+6*y))
z=2
print(14*z+5*(6-(2*z+3)))
```

13.0

6.0

21.0

23.0

2

0.0

-16

23