

9 April 26

Wednesday

Application of Artificial Intelligence

1. Price comparison - Price runner
Website : Shopzilla
2. Virtual Assistance - Alexa, Siri
3. Recommendation system - Netflix, Youtube
4. Weather forecasting - Temperature of weather
prediction one variations
5. Fraud Detection - Insurance, Finance
Healthcare.
6. Autonomous vehicles - Self Driving car
7. Smart Home Devices - CCTV, Tab, bulb
8. Health care Diagnostics - IBM Watson Health
9. Language Translation - Google Translate
10. Customer Service Chatbox - Zendesk
11. Educational Tools - Duolingo

Que. Define AI

Ans. AI refers to machines simulation human-like intelligence: learning, decision-making, problem-solving.

AI Project cycle -

1. Problem scoping
2. Data Acquisition
3. Data Exploration
4. Data Preparation
5. Modelling
6. Evaluation
7. Deployment

AI Project cycle - The AI Project cycle is a structural six-stage process used to design, build, test and deploy AI solutions.

Date:

Page No.:

Arithmetic Operations

1. + Addition = $23 + 17 = 40$

2. - Subtraction = $100 - 45 = 55$

3. * Multiplication = $9 * 8 = 72$

4. / Division = $81 / 9 = 9$

5. ** Exponent = $5 ** 3 = 125$

6. % Modulus = $29 \% 6 = 5$ (Remainder)

7. // floor division = $45 // 4 = 11$ (Quotient)

Relation Operations

1. Equal $10 = 10$ = True +
2. Not equal $15 \neq 20$ True -
3. Greater than $25 > 20$ True
4. Less than $10 < 15$ True

Logical operations

- AND $(5 > 3)$ and $(8 > 6)$ True
- OR $(5 > 3)$ or $(8 > 6)$ True
- NOT $\text{not}(5 > 3)$ False

Date :

Page No. :

(1) Addition (+)

Explanation - The + operator adds two numbers

$$a = 10$$

$$b = 12$$

$$c = a + b$$

Print ("The addition =", c)

Output =

~~The addition = 22~~

2. Subtraction (-)

Explanation - The - operator subtracts one number from another

$$a = 25$$

$$b = 5$$

$$c = a - b$$

Print ("The subtraction =", c)

Output = ~~The subtraction = 20~~

3. Multiplication (*)

Explanation = The * operator multiplies two numbers.

$$x = 5$$

$$y = 10$$

$$z = x * y$$

Print ("The product = ", z)

Output = The product = 50

4. Division (/)

Explanation = The / operator divides one number by another.

$$x = 35$$

$$y = 5$$

$$z = x / y$$

Print ("The division = ", z)

Output = The division = 7.0

5. Exponent (**)

Explanation: The ** operator raises a number to a power.

$$a = 25$$

$$b = 2$$

$$c = a ** b$$

Print ("The exponent =", c)

Output = The exponent = 625

6. Modulus (%)

Explanation: The % operator gives the remainder after division.

$$a = 40$$

$$b = 3$$

$$c = a \% b$$

Print ("The modulus =", c)

Output = The modulus = 1

7. Floor Division (//)

Explanation = Floor division returns the quotient without the decimal part

$$a = 38$$

$$b = 3$$

$$c = a // b$$

Print ("The floor division =", c)

Output - The floor division = 12

1. Equal To (==)

Explanation - The == operator checks whether two values are equal, It returns True or False.

$$a = 40$$

$$b = 20$$

$$c = a == b$$

Print (c)

Output - False

2. Not Equal (\neq)

$$a = 40$$

$$b = 20$$

$$c = (a \neq b)$$

Print (c)

Output = True

Explanation = Since 40 is not equal to 20, the result is True.

3. Greater than ($>$)

$$a = 40$$

$$b = 20$$

$$c = (a > b)$$

Print (c)

Output = True

Explanation = Since 40 is greater than 20, the result is True.

Date :

Page No. :

4. less Than ($<$)

Explanation = The $<$ operator checks whether the first number is smaller than the second

$$a = 20$$

$$b = 40$$

$$c = a < b$$

Output = True

History of AI

From Mc

Warren McCulloch and Walter Pitts (1943)



Turing Test in (1950)



Dartmouth Conference in (1956)



ELIZA in (1966)



Expert Systems in (1980s)



AI Winters



GPT-3 (2020) and ChatGPT (2022)

1. Warren MC Culloch and Walter Pitts
Artificial Neurons (1943)
2. Alan Turing - "Computing Machinery and Intelligence" (1950)
3. Dartmouth John McCarthy - Father of Artificial Intelligence (1956)

Date :
Page No. :

4. Gossey Karpov - IBM's Deep Blue (1997)

~~Good~~

~~Done 7/26~~

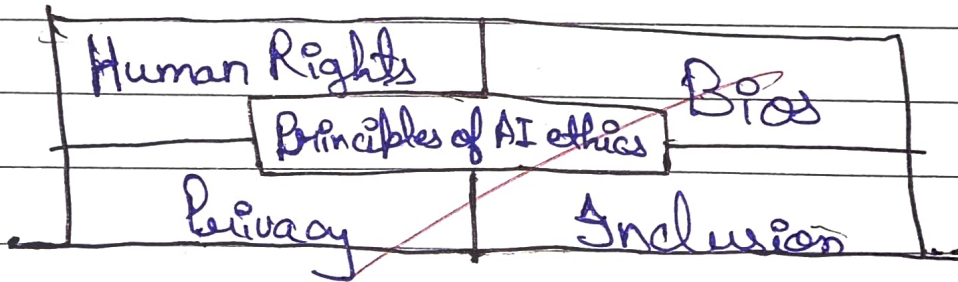
AI Ethics

Date: 2 July 26
Page No.:

AI Principles:

- Humane centered
- Beneficial
- Fairness
- Transparency
- Privacy
- Accountability
- Safety

★ Principles of AI Ethics affecting AI solution quality.



★
4/7/26