Date :
Page No. :

6th April, 26 Ch-1 H.W

Introduction to A.I

Applications of A.I

1. Virtual Assistants → Siri, Google assistants and Amazon Alexa.
2. Recommendation Systems → Netflix, Youtube, Amazon and Spotify.
3. Autonomous Vehicles → Self-driving Car like Tesla
4. Smart Home devices → Smart light, Smart Security Systems.
5. Fraud detection → Bank and financial institutes detect fake transactions.
6. Healthcare diagnostics → Detect diseases (like- cancer), analyze

X-rays, MRI scans

7. Smart phone Camera → Facial recognition, potrait mode, night mode.

8. Language Translation → Google Translate, real-time Translation apps.

9. Customer Service Chatbots → Bank Chatbots, website help assistants.

10. Educational Tools → Duolingo, Khan academy

11. Social media → Instagram, Watsapp, Facebook.

12. Gaming → Bgmi, Chess, Ludo

13. Shopping Assistants → Amazon, flipkart, Nykaa, Myntra.

14. Navigation and Maps → Google Map, Route planning.

Date :
Page No. :

15. Voice recognisation → Voice Command and Speech to text application.

Date :
Page No. :

6/04

A.I Project cycle

C.W

23rd

A.I Project Cycle

- Problem Scoping (search problem)
- Data acquisition (collect data)
- Data exploration (Explore)
- Data preparation (prepare)
- Modelling ((comparison)
- Evaluation (Finalize)
- Deployment (Done/Work completed)

Date :
Page No. :

23rd/04

Arthmetic Operations. C.W

1. + Addition — 23+17 = 40
2. - Subtraction. — 100-45 = 55
3. * Multiplication — 9*8 = 72
4. / Division. — 81/9 = 90
5. ** Exponent — 5**3 = 125
6. % Modulus — 29%6 = 5 (Remaining)
7. // Floor division. — 45//4 = 11 (Quotient)

Good

Date :
Page No. :

Relational Operations

1. Equal	10 == 10	True
2. Not Equal	15 != 20	True
3. Greater than	25 > 20	True
4. Less than	10 < 15	True
5. Greater or Equal	18 >= 18	True
6. Less or Equal.	12 <= 20	True

Date :
Page No. :

Logical Operators.

AND	(5>3) and (8>6)	True
OR	(5>3) or (8>6)	True
NOT	not (5>3)	False

Programming

(i) Addition

```
a = 9
b = 10
c = (a+b)
Print ("The sum of a and b = ", c)
```

[output → The sum of a and b = 19]

(ii) Subtraction

```
a = 29
b = 7
c = (a-b)
Print ("The difference = ", c)
```

Date :
Page No. :

[output → The difference = 22]

(iii) Multiplication

x = 5
y = 10
z = (xy)

Print ("The product = ", z)

[output → The product = 50]

(iv) Division

a = 35
b = 7
c = a/b

Print (" The division = ", c)

[output → The division = 5]

Date :
Page No. :

v) Exponent

```
a = 25
b = 2
c = (a ** b)

Print("The exponent = ", c)
```

[output → The exponent = 625]

vi) % Modulus

```
a = 40
b = 3
c = (a % b)

Print("The modulus = ", c)
```

[output → The modulus = 1]

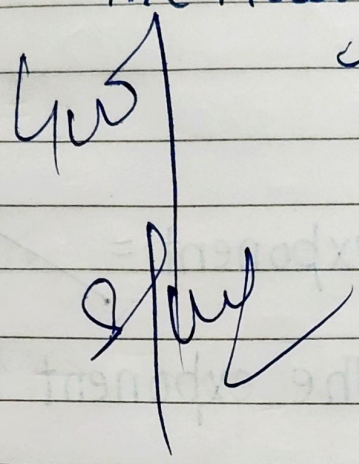
vii) Floor Division

```
a = 38
b = 3
c = (a // b)
```

Date :
Page No. :

Print ("The Floor division = ", c)

[Output → The Floor division = 12.]



Date :
Page No. :

30, April

Relational programming

1. Equal

```
a = 40
b = 20
c = a == b

print (c)
```

[Output → False].

2. Not Equal

```
a = 40
b = 20
c = a != b

print (c)
```

[output → True]

Date :
Page No. :

3. Greater than

```
a = 40
b = 20
c = a > b

print(c)
```

[output → True].

4. less than

```
a = 40
b = 20
c = a < b

print(c)
```

[output → False.]

5. less than equal to

```
a = 40
b = 20
c = a <= b
```

print (c)

[output → False]

6. Greater than equal to

a = 40

b = 20

c = a >= b

print(c)

[output → True]