

# **REPORT**

## **ASSIGNMENT-5**

### **Working statement:**

This report compiles all required components into a single document, including the algorithm and flowchart, Linux terminal screenshots with the shell script, and the infographic. It also contains the SMART goals and certification research, along with a screenshot of my updated LinkedIn profile. Additionally, the report includes hackathon registration or planning details, a complete career roadmap, and a reflection section discussing the challenges, skills gained, and future application of what I learned. Finally, the GitHub link where all related files are uploaded is also provided for verification and reference.

### **ALGORITHM:**

START Initialize empty list: Job\_List

WHILE True:

    DISPLAY "1. Add New

Application"

    DISPLAY "2. Update  
Application

ELSE IF user\_choice == 2 THEN  
    INPUT

Company\_Name\_to\_Search  
        SEARCH Job\_List for  
Company\_Name\_to\_Search

    IF found THEN  
        DISPLAY "Current  
Status: " + Status

        INPUT New\_Status

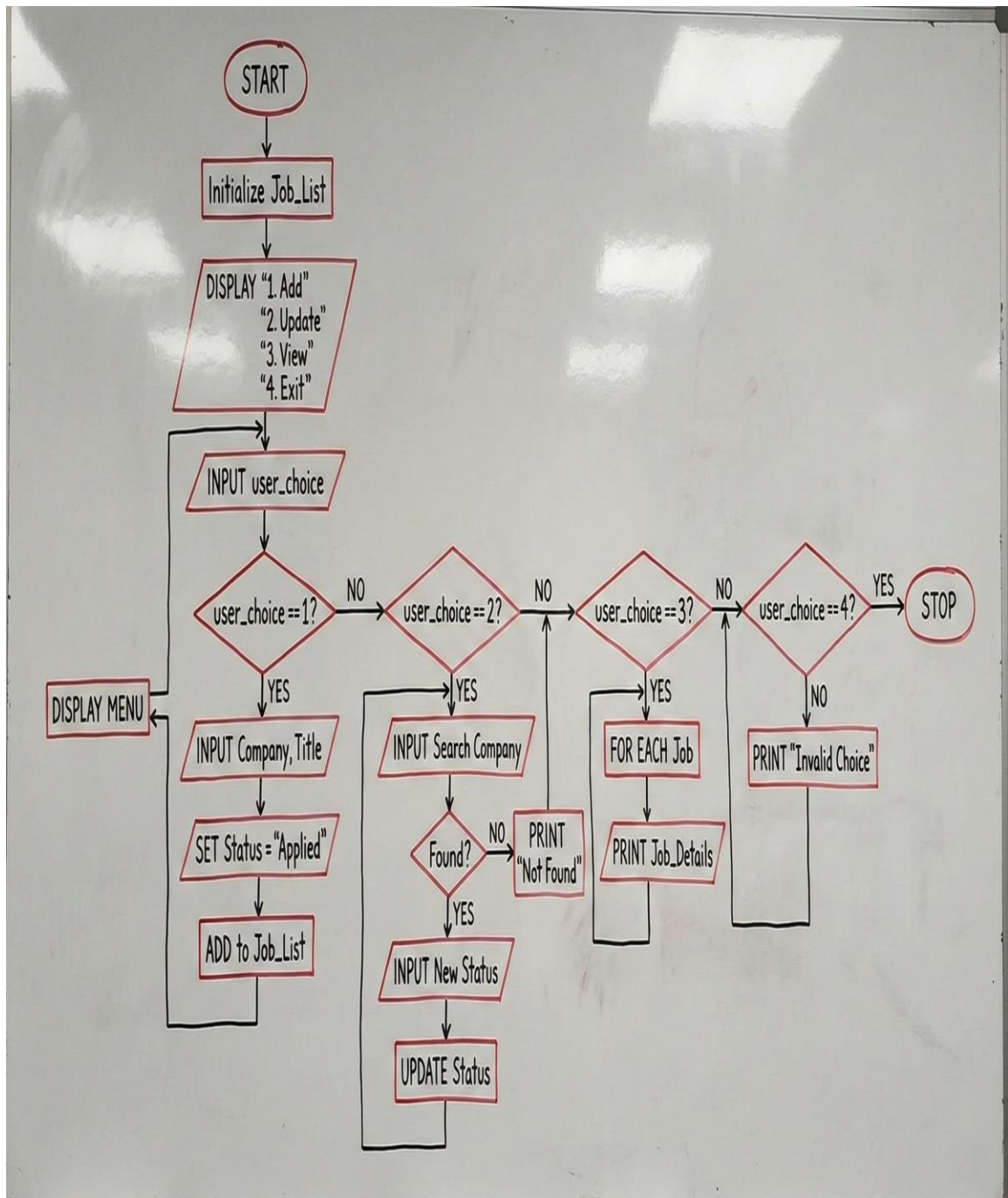
```
                SET Status =  
New_Status  
                PRINT "Status  
Updated."  
  
            ELSE  
                PRINT "Job not  
found."  
            END IF
```

```
        ELSE IF user_choice == 3  
THEN  
            FOR EACH Job in  
Job_List DO  
  
                PRINT Job_Details  
            END FOR
```

```
ELSE IF user_choice == 4 THEN
    PRINT "Exiting
System."
    BREAK Loops
ELSE
    PRINT "Invalid
Choice. Try again."
    END IF
END WHILE
```

STOP

FLOWCHART:



**LINUX & AUTOMATION PRACTICE:**

## SCREENSHOTS→

```
anush@Anushka-s_Asus MINGW64 /c/lab-5
$ pwd
/c/lab-5

anush@Anushka-s_Asus MINGW64 /c/lab-5
$ ls

anush@Anushka-s_Asus MINGW64 /c/lab-5
$ mkdir anushka

anush@Anushka-s_Asus MINGW64 /c/lab-5
$ cd anushka

anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ touch file.txt

anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ touch cp.txt

anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ rm cp.txt

anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ cat cp.txt
cat: cp.txt: No such file or directory

anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ cat file.txt
My name is Anushka
Roll No. 2501730077
B.Tech CSE (AI&ML)
Section B
anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ cp file.txt csf.txt

anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ cat csf.txt
My name is Anushka
Roll No. 2501730077
B.Tech CSE (AI&ML)
Section B
anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ mv csf.txt csfcp.txt

anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ cat csfcp.txt
My name is Anushka
Roll No. 2501730077
B.Tech CSE (AI&ML)
Section B
anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ bash

anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ chmod 755 file.txt
```

```
anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ touch tripathi.sh

anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ bash tripathi.sh

anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ cat tripathi.sh
#!/bin/bash

echo "Creating Career Development Folder Structure..."

mkdir -p Career/Certifications
mkdir -p Career/Projects
mkdir -p Career/Internships
mkdir -p Career/Resumes
mkdir -p Career/Documentation

echo "Folders Created Successfully!"

echo "System Uptime:"
uptime
anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ chmod +x tripathi.sh

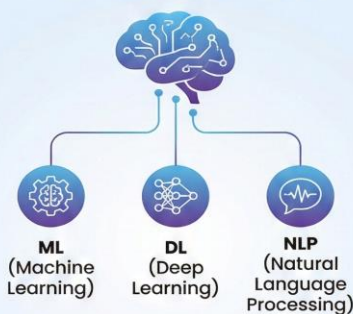
anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ bash tripathi.sh
Creating Career Development Folder Structure...
Folders Created Successfully!
System Uptime:
tripathi.sh: line 14: uptime: command not found

anush@Anushka-s_Asus MINGW64 /c/lab-5/anushka
$ |
```

# INFOGRAPHIC:

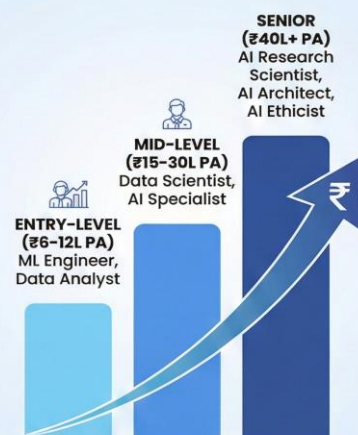
## EXPLORING THE DOMAIN OF **ARTIFICIAL INTELLIGENCE (AI)** – A 1-PAGE OVERVIEW

### 1. TECHNOLOGY OVERVIEW



Creating smart machines that simulate human intelligence, learn from data, and improve over time. Powers everything from recommendation engines to autonomous vehicles.

### 2. JOB ROLES & SALARY TRENDS (INDIA)



### 3. KEY CERTIFICATIONS (LINK TO TASK 4)



[Task 4](#)

### 4. INDIAN STARTUP EXAMPLE: **HAPTIK**



An AI-powered conversational platform that enables businesses to build intelligent chatbots for customer support, engagement, and sales. Acquired by Reliance Industries.





# **CAREER PLANNING &** **PROFESSIONAL READINESS**

## **1. Short-Term SMART Goal (0–6 Months)**

**Goal:** By **April 2026**, I will complete and publish **two major GitHub projects** (one full-stack web application and one data-analysis project).

**Measurable Indicators:**

- 2 repositories created
- Each with **≥10 commits**
- Proper documentation (README, instructions)
- At least one external engagement (star, fork, or peer feedback)

## **2. Medium-Term SMART Goal (1–2 Years)**

**Goal:** By **December 2027**, I will complete a recognized cloud or analytics certification and secure an internship or entry-level role in a software/data-related field.

**Measurable Indicators:**

- Certification earned (official result)
- Internship/job offer received
- Participation in at least **2 technical interviews**

## **3. Long-Term SMART Goal (3–5 Years)**

**Goal:** By **December 2030**, I will become a professional **Software Engineer/Data Engineer**, contributing to production-level projects and leading at least one module.

**Measurable Indicators:**

- Full-time position obtained
- Documented responsibility for a project/module
- Positive performance reviews / quantifiable achievements
  
- **Provider:** Amazon Web Services (AWS)
- **Duration:** 2–4 months (self-study)
- **Cost:** Approx. USD \$150
- **Skills Covered:**
  - Cloud architecture
  - AWS compute, storage, networking
  - Security, IAM, serverless (Lambda)

- Designing scalable and cost-efficient systems
- **Alignment with SMART Goals:**
  - Supports the medium-term goal of earning a cloud certification.
  - Strengthens eligibility for cloud, backend, or full-stack engineering roles.
  - Helps long-term career growth as modern engineering roles expect cloud literacy.
- **Provider:** Google (via Coursera)
- **Duration:** ~6 months (self-paced; 5–7 hours/week)
- **Cost:** USD \$39–49 per month (approx. \$240–300 total)
- **Skills Covered:**
  - Data cleaning & transformation
  - SQL & spreadsheets
  - Visualization (Tableau/Sheets)
  - Data ethics, statistics, problem-solving
- **Alignment with SMART Goals:**
  - Complements short-term projects involving data.
  - Supports medium-term goal of certification + job readiness.
  - Builds foundation for long-term vision of becoming a data engineer.

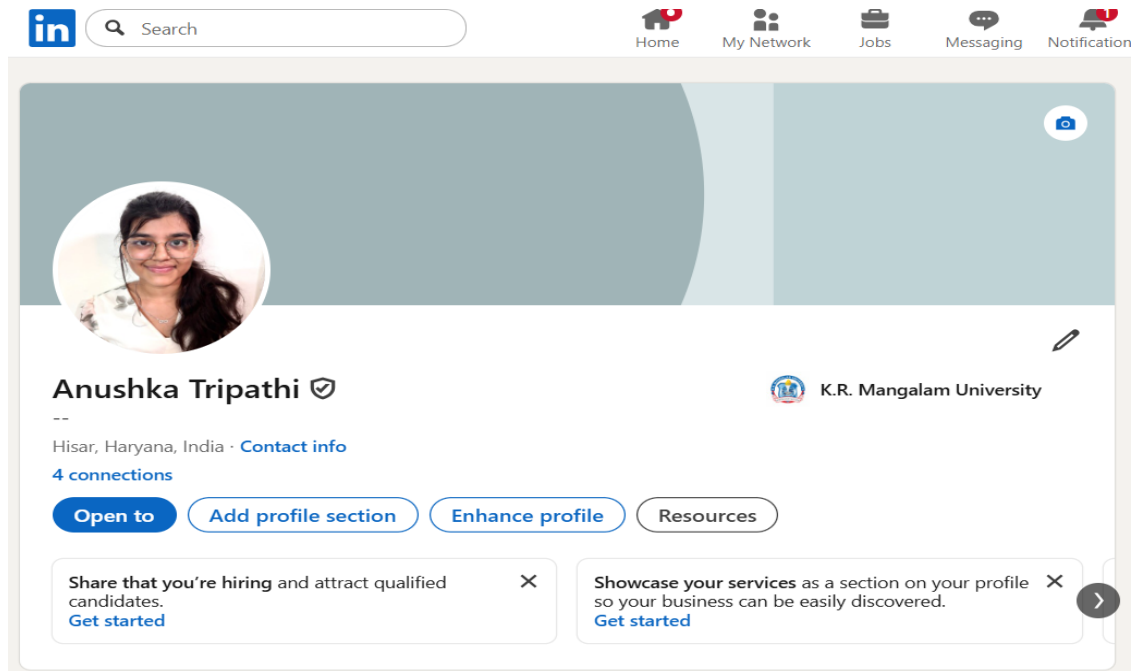
I updated my LinkedIn profile with:

- Professional profile photo
- Summary/About section
- Education details
- Minimum 3 technical skills
- Added projects and certifications (where applicable)

**LinkedIn URL:**

[https://www.linkedin.com/in/anushka-tripathi-2a6669380?utm\\_source=share&utm\\_campaign=share\\_via&utm\\_content=profile&utm\\_medium=ios\\_app](https://www.linkedin.com/in/anushka-tripathi-2a6669380?utm_source=share&utm_campaign=share_via&utm_content=profile&utm_medium=ios_app)

**Screenshot:**



**GitHub Link:** <https://github.com/Anushka-Tripathi>

**All files (algorithm, script, infographic, etc.) have been uploaded here:**

**GitHub Repository Link:** <https://github.com/Anushka-Tripathi/CSFCP-Assignment-5>

## Chosen Activity: Hackathon Participation

- **Hackathon Name:** [Example: Hackathon-For-Good 2026 / MLH Hackathon]
- **Date:** [Insert Date]
- **Status:** [Registered / Planning to Participate]

## Preparation Plan:

1. Identify a problem statement related to web development or data analytics.
2. Form a team of 2–4 members with complementary skill sets.
3. Prepare a basic skeleton or prototype before the event.
4. Practice using Git/GitHub for collaboration.
5. Research APIs, datasets, or tools needed for the final project.
6. Prepare a short pitch deck for final submission.

# Career Roadmap

My career roadmap outlines the journey I intend to follow as I transition from a student into a professional software or data engineer. This structured plan includes milestones such as skills development, certifications, internships, and long-term achievements.

## **Year 0: Current Academic Year (2025–2026)**

My immediate goal is to strengthen my technical foundation through hands-on practice. I plan to build two substantial projects: a full-stack web application and a data-analysis tool. These projects will be uploaded to GitHub with complete documentation and version history. At the same time, I will update my LinkedIn profile to reflect my growing skill set—Python, JavaScript, SQL, React, and cloud fundamentals.

This year, I will also participate in a hackathon or contribute to an open-source project. This will help me gain teamwork experience, exposure to real-world coding problems, and an opportunity to showcase innovation. These activities will directly contribute to achieving my short-term SMART goal.

## **Year 1–2: Skill Expansion and Professional Entry (2026–2027)**

After completing my undergraduate degree, my next milestone is completing a professional certification. I plan to pursue either the AWS Certified Solutions Architect – Associate or the Google Data Analytics Professional Certificate. These certifications will give me a competitive edge, especially in cloud or data-driven roles.

During this period, I will focus on securing an internship or an entry-level position. An internship will help me understand industry workflows such as agile development, code reviews, and deployment pipelines. Through practical tasks—bug fixing, feature development, testing, and documentation—I will build real professional experience. I also plan to expand my portfolio with smaller side projects or continued open-source contributions.

## **Year 3–4: Professional Growth & Specialization (2027–2029)**

With foundational experience gained, I aim to progress into more structured software engineering or data engineering roles. This phase will focus on improving my understanding of backend systems, cloud architecture, data pipelines, and optimization techniques.

I also plan to take on responsibilities such as leading a small feature or mentoring new interns. Alongside work, I will explore advanced training in areas like DevOps, cloud security, or data engineering tools (e.g., Airflow, Spark, Kubernetes).

This period will help me transition from a beginner-level engineer to a skilled, confident professional contributing meaningfully to projects.

## **Year 5: Career Consolidation & Leadership (2029–2030)**

By this stage, my goal is to secure a full-time position as a Software Engineer or Data Engineer. I will

work on designing and maintaining production-level systems and possibly leading modules or small teams.

My long-term SMART goal will be fulfilled when I can independently own a project component, deliver quality results, and demonstrate measurable impact. I also plan to continue learning, contribute to open-source communities, and attend tech events or workshops.

Ultimately, I aim to build a career of continuous improvement, innovation, and leadership in the software or data engineering domain.

# **REFLECTION**

Working on this assignment was both challenging and rewarding. One of the main challenges I faced was organizing all the required components in a clear and structured manner. Gathering accurate information about certifications, planning a hackathon participation, and updating my LinkedIn profile required careful research and attention to detail. Additionally, writing SMART goals and developing a long-term career roadmap pushed me to think critically about my future and identify realistic yet ambitious milestones. This level of self-assessment was new to me and required deep reflection.

Throughout the assignment, I improved several important skills. My research skills strengthened as I compared certifications and

explored different career paths. I also enhanced my ability to set measurable and achievable goals using the SMART framework.

Writing the career roadmap improved my planning, organization, and long-term thinking. Updating my LinkedIn profile helped me improve my professional communication and digital presence.

The lessons I gained from this assignment will significantly support my academic and professional journey. I now have a clearer understanding of the skills I must develop, the certifications I should pursue, and the types of projects I need to work on. The structured plan I created will guide my decisions regarding internships, courses, and career opportunities. Overall, this assignment has given me direction, confidence, and a practical foundation for building my future career.

**NAME: ANUSHKA TRIPATHI**

**ROLL NO: 2501730077**

**COURSE: B.TECH CSE (AI & ML)**