



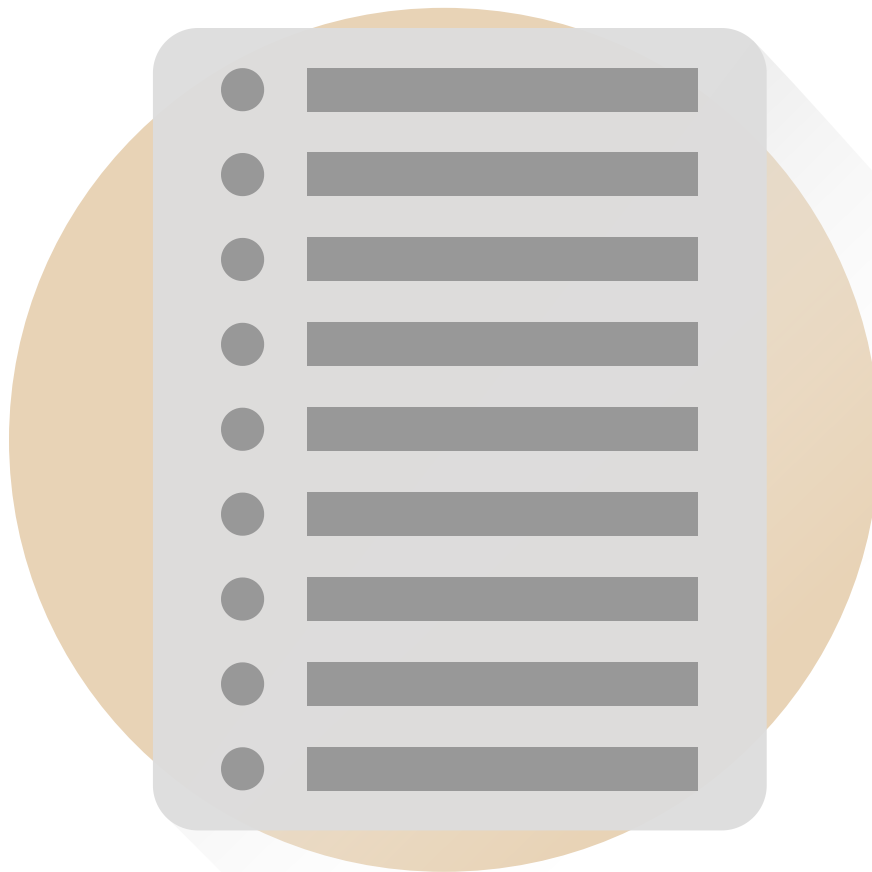
Saudi Arabia King Abdulaziz university
The faculty of computer and information technology
Computer Science Department



Course Registration System

CPCS-331: Artificial Intelligence I

October 22,2022



Team member

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Task Assignment

- Writing the introduction
- Rules
- Technique used to acquire knowledge from the system
- The System's flowchart
- References
- Writing code

Team Members' Percentage Contribution for Each Task

Team Member	Contribution
Najd Khalid Alotaibi	All tasks
Roaa Abdullah Alzahrani	All tasks
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1.Introduction:

1.1 Purpose of The System

The Course Registration system allows students to register their academic subjects based on their own study plans. Earlier, Course Registration system processes were manual processes. It involves filling out registration forms manually, this process is very laborious and time consuming.

The aim of implementing the Course Registration system is to use technology to make human work easier. Students can look for and sign up for courses using this system as a resource. We have done this system for King Abdulaziz University but,all universities can use this tool to speed up and improve the functionality of their current websites and applications. Students will find it to be very helpful and simple to utilize.

1.2 User of the system

Users of our system are students from king Abdulaziz University.

1.3 Expert of The System

Based on the student's responses to the required information, the system determines which courses are available for the student to register for.

1.4 Resource will be used

Web sites that provide information about problems related to course registration enable us to know the problems faced by students .

2. Programming Implementation Idea:

2.1 Rules

Rule 1: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **Collage Name: Faculty of Computing and Information Technology**
- **Department Name: Department of Computer Science**
- **Student ID Number: 2018674**
- **Level Number: 5**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Programming (CPCS-203)**
- ✓ **Discrete Structures (CPCS-222)**
- ✓ **Technical Writing (CPIT-221)**
- ✓ **Islamic Culture (ISLS-101)**

Rule 2: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **Collage Name: Faculty of Science**
- **Department Name: Department of Physics**
- **Student ID Number: 1910235**
- **Level Number: 4**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Thermodynamics (PHY-221)**
- ✓ **Modern Physics (PHY-241)**
- ✓ **Theoretical Methods of Physics (PHY-251)**
- ✓ **Classical Mechanics (PHY-252)**

Rule 3: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **Collage Name: Faculty of Computing and Information Technology**
- **Department Name: Department of Information Technology**
- **Student ID Number: 2054231**
- **Level Number: 6**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Computer Networks (COCS-374)**
- ✓ **Operating Systems (COCS-361)**
- ✓ **Database (COIS-342)**
- ✓ **Islamic Culture (ISLS-401)**

Rule 4: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **College Name: Faculty of Law**
- **Department Name: Department of Legal System**
- **Student ID Number: 2007225**
- **Level Number: 7**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Natural Resources Act(BL-451)**
- ✓ **Criminal Procedure (BL-463)**
- ✓ **Procedures ACT (BL-470)**
- ✓ **Commercial Contracts (BL-412)**

Rule 5: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **College Name: Faculty of Computing and Information Technology**
- **Department Name: Department of Information Technology**
- **Student ID Number: 1906763**
- **Level Number: 5**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Programming (COCS-307)**
- ✓ **Human & Computer Interaction (COIT-283)**
- ✓ **Data Structures (COCS-304)**
- ✓ **Islamic Culture (ISLS-301)**

Rule 6: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **College Name: Faculty of Law**
- **Department Name: Department of Legal System**
- **Student ID Number: 2006125**
- **Level Number: 4**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Commercial Law (BL-211)**
- ✓ **Commitment Sources (BL-220)**
- ✓ **Administrative Law (BL-230)**
- ✓ **Public Criminal Law (BL-260)**

Rule 7: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **Collage Name: Faculty of Science**
- **Department Name: Biology Department**
- **Student ID Number: 2057943**
- **Level Number: 6**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Biology (BIO-222)**
- ✓ **Biochemistry (BIOC-371)**
- ✓ **Arabic Language (ARAB-201)**
- ✓ **Islamic Culture (ISLS-201)**

Rule 8: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **Collage Name: Faculty of Economics and Administration**
- **Department Name: Marketing Department**
- **Student ID Number: 2541796**
- **Level Number: 5**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Reports preparation (MA-203)**
- ✓ **Fundamentals of Finance (MA-230)**
- ✓ **Administrative Information System (MA-234)**

Rule 9: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **Collage Name: Faculty of Computing and Information Technology**
- **Department Name: Department of Computer Science**
- **Student ID Number: 2045273**
- **Level Number: 8**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Software Engineering (CPCS-351)**
- ✓ **Artificial Intelligence (CPCS-331)**
- ✓ **Introduction of project management (CPIS-334)**
- ✓ **Islamic Culture (ISLS-301)**

Rule 10: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **Collage Name: Faculty of Economics and Administration**
- **Department Name: Department of Finance**
- **Student ID Number: 2005905**
- **Level Number: 10**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Business Law (BL-306)**
- ✓ **Organizational Behavior (BUS-320)**
- ✓ **Business Quantitative Analysis (BUS-323)**

Rule 11: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **Collage Name: Faculty of Economics and Administration**
- **Department Name: Department of Business Administration**
- **Student ID Number: 2005863**
- **Level Number: 4**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Principles of Accounting II (ACCT-213)**
- ✓ **Principles of Management (BUS-220)**
- ✓ **Principles of Macroeconomics (ECON-203)**
- ✓ **Advanced English Language II (ELIB-202)**

Rule 12: If the student presents with the following information:

- **University Name: King Abdulaziz University**
- **Collage Name: Faculty of Science**
- **Department Name: Department of Chemistry**
- **Student ID Number: 2106632**
- **Level Number: 5**

Then the answer will be:

The student can register for any of the following courses:

- ✓ **Inorganic Chemistry I (CHEM-221)**
- ✓ **Principles of Organic Chemistry II (CHEM-232)**
- ✓ **Chemical Thermodynamics (CHEM-241)**

Rule 13: If the student presents with the following information:

- **University Name: University of Jeddah**
- **Collage Name: Faculty of Science**
- **Department Name: Department of Biology**
- **Student ID Number: 2106632**
- **Level Number:7**

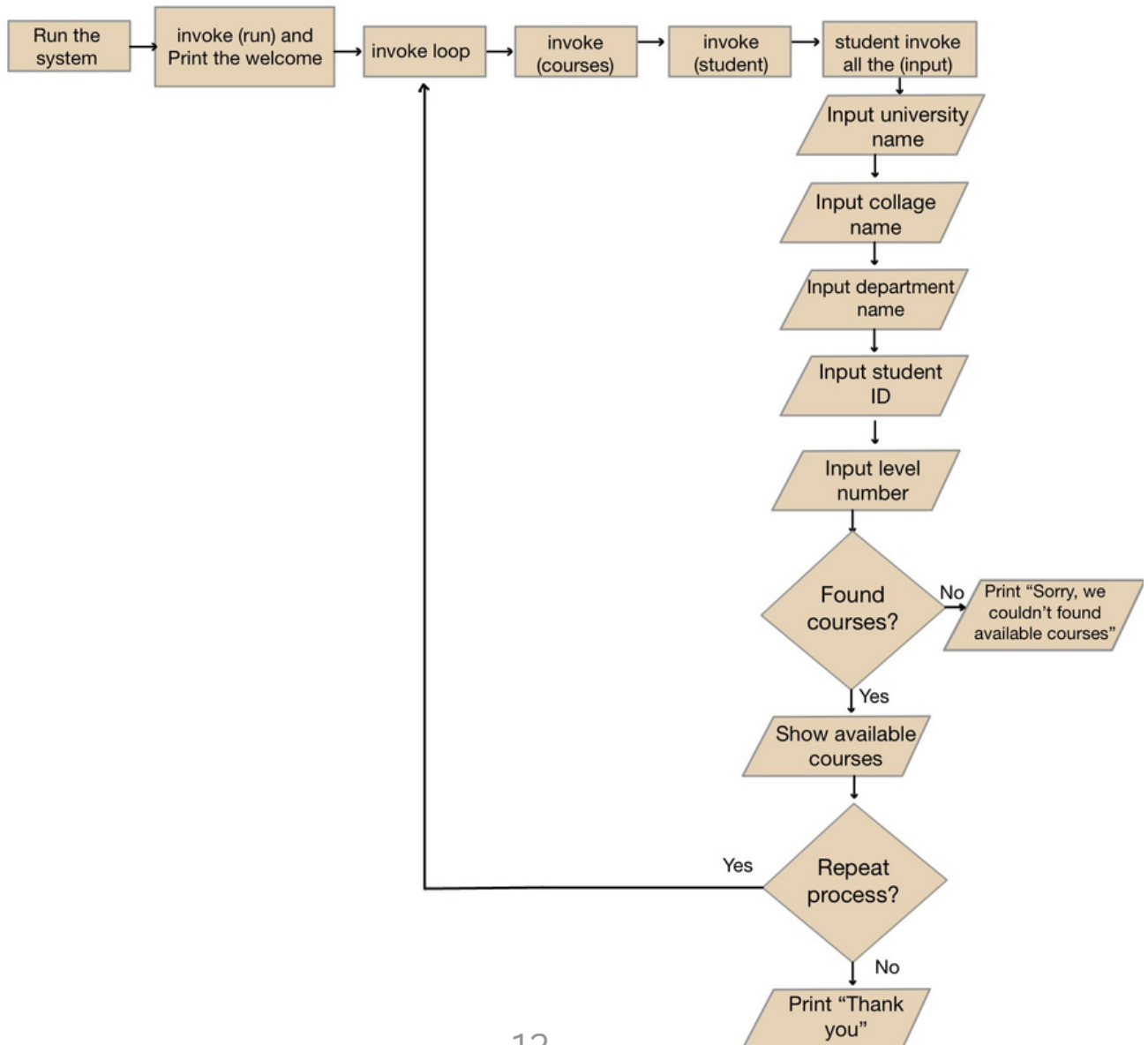
Then the answer will be:

✓ **"Sorry, we couldn't identify your available courses".**

2.2 Technique used to acquire knowledge from the system

We use recursion, backtracking, and reading from the user

2.3 The System's flowchart



3.References:

- Peter, S. R., & N. (2009). Artificial Intelligence: A Modern Approach [ARTIFICIAL INTELLIGENCE 3/E] [Hardcover] (3rd ed.). Prentice Hall.
- Paulson, A. (no date) Problems with course registration: American Public University, APU. Available at: <https://www.apu.apus.edu/help/courses-and-registration/problems-with-course-registration.html> (Accessed: October 20, 2022).
- GeeksforGeeks. (2021, November 9). Expert Systems. Retrieved October 21, 2022, from <https://www.geeksforgeeks.org/expert-systems/>.
- Verma, Y. (2021, November 12). A Complete Tutorial on Expert Systems. Analytics India Magazine. Retrieved October 22, 2022, from <https://analyticsindiamag.com/a-complete-tutorial-on-expert-systems/>.

4. Appendices:

4.1 The source code

```
from experta import*
from random import choice
print("\n")
print("-----")
print("  Welcome to the Course Registration System  ")
print("-----")
repeat = True
while repeat:
    class Student(Fact):
        pass
    class Courses(KnowledgeEngine):
        @Rule(AND(Student(University_Name="King Abdulaziz University"),
                    Student(Collage_Name="Faculty of Computing and
Information
Technology"),
                    Student(Department_Name="Department of Computer
Science"),
                    Student(Student_ID_Number="2018674"),
                    Student(Level_Number="5"))))
        def CS_level_5(self):
            print("The student can register for any of the following
courses: \n Programming (CPCS-203)\n Discrete Structures (CPCS-
222)\n Technical Writing (CPIT-221) \n Islamic Culture (ISLS-101)")
```



```

@Rule(AND(Student(University_Name="King Abdulaziz University"),
            Student(Collage_Name="Faculty of Science"),
            Student(Department_Name="Department of Physics"),
            Student(Student_ID_Number="1910235"),
            Student(Level_Number="4")))
    def Physics_level_4(self):
print("The student can register for any of the following courses":\n
Thermodynamics (PHY-221)\n Modern Physics (PHY-241)\n Theoretical
Methods of Physics (PHY-251)\n Classical Mechanics (PHY-252)")
    @Rule(AND(Student(University_Name="King Abdulaziz University"),
            Student(Collage_Name="Faculty of Computing and
Information Technology"),
Technology"),
Student(Department_Name="Department of Information
Student(Student_ID_Number="2054231"),
            Student(Level_Number="6")))
    def IT_level_6(self):
        print("The student can register for any of the following
courses":\n Computer Networks (COCS-374)\n Operating Systems
(COCS-361)\n Database (COIS-342)\n Islamic Culture (ISLS-401)")

@Rule(AND(Student(University_Name="King Abdulaziz University"),
Student(Collage_Name="Faculty of Law"),
            Student(Department_Name="Department of Legal
System"), Student(Student_ID_Number="2007225"),
            Student(Level_Number="7")))
    def Legal_Systems_level_7(self):
print("The student can register for any of the following courses:\n
Natural Resources Act(BL-451)\n Criminal Procedure (BL-463)\n
Procedures ACT (BL-470)\n Commercial Contracts (BL-412)")

```

```

@Rule(AND(Student(University_Name="King Abdulaziz University"),
            Student(Collage_Name="Faculty of Computing and
Information Technology"),
Technology"),
Student(Department_Name="Department of Information
Student(Student_ID_Number="1906763"),
            Student(Level_Number="5")))
def IT_level_5(self):
print("The student can register for any of the following courses:\n
Programming (COCS-307)\n Human & Computer Interaction (COIT-
283)\n Data Structures (COCS-304)\n Islamic Culture (ISLS-301)")
    @Rule(AND(Student(University_Name="King Abdulaziz University"),
            Student(Collage_Name="Faculty of Law"),
            Student(Department_Name="Department of Legal
System"), Student(Student_ID_Number="2006125"),
            Student(Level_Number="4")))
def Legal_Systems_level_4(self):
    print("The student can register for any of the following
courses:\n Commercial Law (BL-211)\n Commitment Sources (BL-
220)\n Administrative Law (BL-230)\n Public Criminal Law (BL-260)")
    @Rule(AND(Student(University_Name="King Abdulaziz University"),
            Student(Collage_Name="Faculty of Science"),
            Student(Department_Name="Biology Department"),
Student(Student_ID_Number="2057943"),
            Student(Level_Number="6")))
def Biology_level_6(self):
print("The student can register for any of the following courses:\n
Biology (BIO-222)\n Biochemistry (BIOC-371)\n Arabic Language (ARAB-
201)\n Islamic Culture (ISLS-201)")

```

```

@Rule(AND(Student(University_Name="King Abdulaziz University"),
            Student(Collage_Name="Faculty of Economics and
Administration"),
            Student(Student_ID_Number="2541796"),
            Student(Department_Name="Marketing Department"),
            Student(Level_Number="5")))
    def Marketing_level_5(self):
print("The student can register for any of the following courses:\n Reports
preparation (MA-203)\n Fundamentals of Finance (MA-230)\n Administrative
Information System (MA-234)")
@Rule(AND(Student(University_Name="King Abdulaziz University"),
            Information Technology"),
            Science"),
            Student(Collage_Name="Faculty of Computing and
Student(Department_Name="Department of Computer
Student(Student_ID_Number="2045273"),
            Student(Level_Number="8")))
    def CS_level_8(self):
print("The student can register for any of the following courses:\n Software
Engineering (CPCS-351)\n Artificial Intelligence
(CPCS-331)\n Introduction of Projects Management (CPIS-334)\n Islamic
Culture (ISLS-301)")
    @Rule(AND(Student(University_Name="King Abdulaziz University"),
            Student(Collage_Name="Faculty of Economics and
Administration"),
            Student(Department_Name="Department of Finance"),
            Student(Student_ID_Number="2005905"),
            Student(Level_Number="10")))
    def Finance_level_10(self):
print("The student can register for any of the following courses:\n Business
Law (BL-306)\n Organizational Behaviour (BUS-320)\n Business Quantitative
Analysis (BUS-323)")

```

```

@Rule(AND(Student(University_Name="King Abdulaziz University"),
            Student(Collage_Name="Faculty of Economics and
Administration"),
Administration"),
Student(Department_Name="Department of Business
Student(Student_ID_Number="2005863"),
            Student(Level_Number="4")))
    def Business_Administration_level_4(self):
print("The student can register for any of the following courses:\n
Principles of Accounting II (ACCT-213)\n Principles of Management
(BUS-220)\n Principles of Macroeconomics (ECON-203)\n Advanced
English Language II (ELIB-202)")
    @Rule(AND(Student(University_Name="King Abdulaziz University"),
            Student(Collage_Name="Faculty of Science"),
            Student(Department_Name="Department of Chemistry"),
Student(Student_ID_Number="2106632"),
            Student(Level_Number="5")))
    def chemistry_level_5(self):
print("The student can register for any of the following courses:\n
Inorganic Chemistry I (CHEM-221)\n Principles of Organic
Chemistry II (CHEM-232)\n Chemical Thermodynamics (CHEM-241)")

@Rule(NOT(Student(University_Name="King Abdulaziz University"),

            Student(Collage_Name="Faculty of Science"),
            Student(Department_Name="Department of Chemistry"),
Student(Student_ID_Number="2106632"),
            Student(Level_Number="5")))
    def Could_Not_Identify(self):
        print("Sorry we couldn't identify your available courses")

```

```

engine = Courses()
engine.reset()
print("\n")
universityName = input("University Name: ")
collageName = input("Collage Name: ")
departmentName = input("Department Name: ")
student_id = input("Student ID Number: ")
levelNumber = input("Level Number: ")
print("\n")
engine.declare(Student(University_Name=universityName),
Student(Collage_Name=collageName),
               Student(Department_Name=departmentName),
Student(Student_ID_Number=student_id),
               Student(Level_Number=levelNumber))
engine.run()
print("\n")
user_repeat = input("Do you want to repeat? (yes/no): ")
if (user_repeat == "yes"):
    repeat = True
else:
    repeat = False
print("\n")
print("-----")
print(" Thank You ")
print("-----")

```

4.2 The Output Screenshot

```
C:\Users\owner\PycharmProjects\pythonProject\venv\Scripts\python.exe C:\Users\owner\PycharmProjects\pythonProject\main.py

-----
Welcome to the Course Registration System
-----

University Name: King Abdulaziz University
Collage Name: Faculty of Computing and Information Technology
Department Name: Department of Computer Science
Student ID Number: 2018034
Level Number: 1

The student can register for any of the following courses:
✓ Programming (CPCS-203)
✓ Discrete Structures (CPCS-222)
✓ Technical Writing (CPIT-221)
✓ Islamic Culture (ISLS-101)

Do you want to repeat? (yes/no):
```

```
University Name: King Abdulaziz University
Collage Name: Faculty of Computing and Information Technology
Department Name: Department of Computer Science
Student ID Number: 2018034
Level Number: 1

The student can register for any of the following courses:
✓ Programming (CPCS-203)
✓ Discrete Structures (CPCS-222)
✓ Technical Writing (CPIT-221)
✓ Islamic Culture (ISLS-101)

Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
Collage Name: Faculty of Science
Department Name: Department of Physics
Student ID Number: 1918256
Level Number: 1

The student can register for any of the following courses":
✓ Thermodynamics (PHY-221)
✓ Modern Physics (PHY-241)
✓ Theoretical Methods of Physics (PHY-251)
✓ Classical Mechanics (PHY-252)

Do you want to repeat? (yes/no):
```

```
University Name: King Abdulaziz University
College Name: Faculty of Science
Department Name: Department of Physics
Student ID Number: 1920239
Level Number: 4

The student can register for any of the following courses":
✓ Thermodynamics (PHY-221)
✓ Modern Physics (PHY-241)
✓ Theoretical Methods of Physics (PHY-251)
✓ Classical Mechanics (PHY-252)

Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
College Name: Faculty of Computing and Information Technology
Department Name: Department of Information Technology
Student ID Number: 2004223
Level Number: 4

The student can register for any of the following courses":
✓ Computer Networks (COCIS-374)
✓ Operating Systems (COCIS-361)
✓ Database (COCIS-342)
✓ Islamic Culture (ISLS-401)

Do you want to repeat? (yes/no):
```

```
University Name: King Abdulaziz University
College Name: Faculty of Computing and Information Technology
Department Name: Department of Information Technology
Student ID Number: 2004223
Level Number: 4

The student can register for any of the following courses":
✓ Computer Networks (COCIS-374)
✓ Operating Systems (COCIS-361)
✓ Database (COCIS-342)
✓ Islamic Culture (ISLS-401)

Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
College Name: Faculty of Law
Department Name: Department of Legal System
Student ID Number: 2007905
Level Number: 7

The student can register for any of the following courses:
✓ Natural Resources Act(BL-451)
✓ Criminal Procedure (BL-463)
✓ Procedures ACT (BL-470)
✓ Commercial Contracts (BL-412)

Do you want to repeat? (yes/no):
```

```
University Name: King Abdulaziz University
College Name: Faculty of Law
Department Name: Department of Legal System
Student ID Number: 2007226
Level Number: 7

The student can register for any of the following courses:
✓ Natural Resources Act(BL-451)
✓ Criminal Procedure (BL-463)
✓ Procedures ACT (BL-470)
✓ Commercial Contracts (BL-412)

Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
College Name: Faculty of Computing and Information Technology
Department Name: Department of Information Technology
Student ID Number: 2006763
Level Number: 3

The student can register for any of the following courses:
✓ Programming (COCIS-307)
✓ Human & Computer Interaction (COIT-283)
✓ Data Structures (COCIS-304)
✓ Islamic Culture (ISLS-301)

Do you want to repeat? (yes/no):
```

```
University Name: King Abdulaziz University
College Name: Faculty of Computing and Information Technology
Department Name: Department of Information Technology
Student ID Number: 2000702
Level Number: 2

The student can register for any of the following courses:
✓ Programming (COC5-307)
✓ Human & Computer Interaction (COIT-283)
✓ Data Structures (COC5-304)
✓ Islamic Culture (ISLS-301)

Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
College Name: Faculty of Law
Department Name: Department of Legal System
Student ID Number: 2000122
Level Number: 2

The student can register for any of the following courses:
✓ Commercial Law (BL-211)
✓ Commitment Sources (BL-220)
✓ Administrative Law (BL-230)
✓ Public Criminal Law (BL-200)

Do you want to repeat? (yes/no):
```

```
University Name: King Abdulaziz University
College Name: Faculty of Law
Department Name: Department of Legal System
Student ID Number: 2000122
Level Number: 2

The student can register for any of the following courses:
✓ Commercial Law (BL-211)
✓ Commitment Sources (BL-220)
✓ Administrative Law (BL-230)
✓ Public Criminal Law (BL-200)

Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
College Name: Faculty of Science
Department Name: Biology Department
Student ID Number: 2007942
Level Number: 2

The student can register for any of the following courses:
✓ Biology (BIO-222)
✓ Biochemistry (BIOC-371)
✓ Arabic Language (ARAB-201)
✓ Islamic Culture (ISLS-201)

Do you want to repeat? (yes/no):
```

```
University Name: King Abdulaziz University
College Name: Faculty of Science
Department Name: Biology Department
Student ID Number: 2007942
Level Number: 2

The student can register for any of the following courses:
✓ Biology (BIO-222)
✓ Biochemistry (BIOC-371)
✓ Arabic Language (ARAB-201)
✓ Islamic Culture (ISLS-201)

Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
College Name: Faculty of Economics and Administration
Department Name: Marketing Department
Student ID Number: 2001794
Level Number: 2

The student can register for any of the following courses:
✓ Reports preparation (MA-203)
✓ Fundamentals of Finance (MA-230)
✓ Administrative Information System (MA-234)

Do you want to repeat? (yes/no):
```



```
University Name: King Abdulaziz University
College Name: Faculty of Economics and Administrative
Department Name: Marketing Department
Student ID Number: 2061906
Level Number: 3

The student can register for any of the following courses:
✓ Reports preparation (MA-203)
✓ Fundamentals of Finance (MA-230)
✓ Administrative Information System (MA-234)

Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
College Name: Faculty of Computing and Information Technology
Department Name: Department of Computer Science
Student ID Number: 2046275
Level Number: 4

The student can register for any of the following courses:
✓ Software Engineering (CPCS-351)
✓ Artificial Intelligence (CPCS-331)
✓ Introduction of Projects Management (CPIS-334)
✓ Islamic Culture (ISLS-301)

Do you want to repeat? (yes/no):
```

```
University Name: King Abdulaziz University
College Name: Faculty of Computing and Information Technology
Department Name: Department of Computer Science
Student ID Number: 2046275
Level Number: 4

The student can register for any of the following courses:
✓ Software Engineering (CPCS-351)
✓ Artificial Intelligence (CPCS-331)
✓ Introduction of Projects Management (CPIS-334)
✓ Islamic Culture (ISLS-301)

Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
College Name: Faculty of Economics and Administrative
Department Name: Department of Finance
Student ID Number: 2069905
Level Number: 3

The student can register for any of the following courses:
✓ Business Law (BL-306)
✓ Organizational Behaviour (BUS-320)
✓ Business Quantitative Analysis (BUS-323)

Do you want to repeat? (yes/no):
```

```
University Name: King Abdulaziz University
College Name: Faculty of Economics and Administrative
Department Name: Department of Finance
Student ID Number: 2069905
Level Number: 3

The student can register for any of the following courses:
✓ Business Law (BL-306)
✓ Organizational Behaviour (BUS-320)
✓ Business Quantitative Analysis (BUS-323)

Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
College Name: Faculty of Economics and Administrative
Department Name: Department of Business Administration
Student ID Number: 2093602
Level Number: 4

The student can register for any of the following courses:
✓ Principles of Accounting II (ACCT-213)
✓ Principles of Management (BUS-220)
✓ Principles of Macroeconomics (ECON-203)
✓ Advanced English Language II (ELI2-202)

Do you want to repeat? (yes/no):
```

```
University Name: King Abdulaziz University
College Name: Faculty of Economics and Administration
Department Name: Department of Business Administration
Student ID Number: 20018601
Level Number: 4

The student can register for any of the following courses:
✓ Principles of Accounting II (ACCT-213)
✓ Principles of Management (BUS-220)
✓ Principles of Macroeconomics (ECON-203)
✓ Advanced English Language II (ELIB-202)

Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
College Name: Faculty of Science
Department Name: Department of Chemistry
Student ID Number: 21000317
Level Number: 5

The student can register for any of the following courses:
✓ Inorganic Chemistry I (CHEM-221)
✓ Principles of Organic Chemistry II (CHEM-232)
✓ Chemical Thermodynamics (CHEM-241)

Do you want to repeat? (yes/no):
```

```
Do you want to repeat? (yes/no): yes

University Name: King Abdulaziz University
College Name: Faculty of Science
Department Name: Department of Chemistry
Student ID Number: 21000327
Level Number: 5

The student can register for any of the following courses:
✓ Inorganic Chemistry I (CHEM-221)
✓ Principles of Organic Chemistry II (CHEM-232)
✓ Chemical Thermodynamics (CHEM-241)

Do you want to repeat? (yes/no): yes

University Name: University of Jeddah
College Name: Faculty of Science
Department Name: Department of Biology
Student ID Number: 21000337
Level Number: 7

Sorry we couldn't identify your available courses

Do you want to repeat? (yes/no):
```

```
Student ID Number: 21000337
Level Number: 8

The student can register for any of the following courses:
✓ Inorganic Chemistry I (CHEM-221)
✓ Principles of Organic Chemistry II (CHEM-232)
✓ Chemical Thermodynamics (CHEM-241)

Do you want to repeat? (yes/no): yes

University Name: University of Jeddah
College Name: Faculty of Science
Department Name: Department of Biology
Student ID Number: 21000337
Level Number: 8

Sorry we couldn't identify your available courses

Do you want to repeat? (yes/no): no

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Thank You
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Process finished with exit code 0
```