23.08.24 HOME TASK

```
students={}
def add(students):
  ID=int(input("Enter the student ID:"))
  name=input("Enter the student name: ")
  grade=input("Enter the student grade: ")
  major=input("Enter the student major : ")
  students[ID]={"Name":name, "Grade":grade, "Major":major}
  print("Students details added successfully.")
def display(students):
  if len(students)!=0:
     print(students)
  else:
     print("Not found")
def remove(students):
  ID=int(input("Enter the student ID:"))
  if ID in students:
     students.pop(ID)
     print("Student ID is removed")
  else:
     print("Not found")
def update(students):
  ID=int(input("Enter the student ID : "))
  if ID in students:
     name=input("Enter the name to be updated: ")
     grade=input("Enter the grade to be updated: ")
     major=input("Enter the major to be updated: ")
     students[ID]["Name"]=name
     students[ID]["Grade"]=grade
     students[ID]["Major"]=major
     print("Updated successfully")
  else:
     print("Not found")
```

```
def search(students):
  ID=int(input("Enter the student ID : "))
  if ID in students:
     print(students[ID])
  else:
     print("Not found")
while True:
  print("1.Add \n2.Display \n3.Remove \n4.Update \n5.Search \n6.Exit")
  option=int(input("Enter the option : "))
  match option:
     case 1:
       add(students)
     case 2:
       display(students)
     case 3:
       remove(students)
     case 4:
       update(students)
     case 5:
       search(students)
     case 6:
       print("Goodbye")
     case _:
       print("Invalid option")
```