

10. SEARCH OPERATION USING DICTIONARY OBJECT

A binary file named "emp.dat" contain certain records of employees (empid, empname and salary). Write a menu driven python program to do the following tasks:

1. Append a record
2. Search a record
3. Read and display all

Source Code

```
import pickle

f = open("emp.dat", "a") # Ensure that the file exists
f.close()

def appendEmp():
    empID = int(input("Enter employee ID: "))
    empName = input("Enter emp name: ")
    salary = int(input("Enter emp salary: "))

    with open("emp.dat", "ab") as f:
        pickle.dump({"empID":empID, "empName":empName, "salary":salary}, f)

def searchEmp():
    emps = []
    with open("emp.dat", "rb") as f:
        while True:
            try: # Using a try block to catch errors
                emp = pickle.load(f)
                emps.append(emp)
            except:
                break

    empID = int(input("Enter employee ID: "))

    found = False # Using a loop to search for a values
    for item in emps:
        if item["empID"] == empID:
            print("-----")
```

```

        print("ID      :", item["empID"])
        print("Name    :", item["empName"])
        print("Salary:", item["salary"])
        print("-----")
        found = True
        break

if not found:
    print("Employee not found")

def showEmps():
    emps = []
    with open("emp.dat", "rb") as f:
        while True:
            try: # Using a try block to catch errors
                emp = pickle.load(f)
                emps.append(emp)
            except EOFError:
                break
    for item in emps:
        print("-----")
        print("ID      :", item["empID"])
        print("Name    :", item["empName"])
        print("Salary:", item["salary"])
        print("-----")

while True:
    print("=====")
    print("What would you like to do?")
    print("""
[1] Append an employee
[2] Search for an employee
[3] Show all employees
[4] Exit
""")

    ch = input("Enter your choice[1/2/3/4]: ")

    if ch == "1":
        appendEmp()

    elif ch == "2":
        searchEmp()

    elif ch == "3":
        showEmps()

    elif ch == "4":
        print("[ Exiting ]") # Break from the loop to exit
        break

```

```
else:
    print("[ Invalid Choice ]") # In case user inputs a choice that was n
```

OUTPUT

```
=====
What would you like to do?
```

- [1] Append an employee
- [2] Search for an employee
- [3] Show all employees
- [4] Exit

```
Enter your choice[1/2/3/4]: 1
Enter employee ID: 1
Enter emp name: Manu
Enter emp salary: 234244
```

```
=====
What would you like to do?
```

- [1] Append an employee
- [2] Search for an employee
- [3] Show all employees
- [4] Exit

```
Enter your choice[1/2/3/4]: 1
Enter employee ID: 2
Enter emp name: Ninu
Enter emp salary: 23444
```

```
=====
What would you like to do?
```

- [1] Append an employee
- [2] Search for an employee
- [3] Show all employees
- [4] Exit

```
Enter your choice[1/2/3/4]: 2
Enter employee ID: 2
```

```
-----
```

```
ID      : 2
Name    : Ninu
Salary: 23444
```

```
-----
```

```
=====
What would you like to do?
```

- [1] Append an employee

- [2] Search for an employee
- [3] Show all employees
- [4] Exit

Enter your choice[1/2/3/4]: 3

ID : 1
Name : Manu
Salary: 234244

ID : 2
Name : Ninu
Salary: 23444

=====

What would you like to do?

- [1] Append an employee
- [2] Search for an employee
- [3] Show all employees
- [4] Exit

Enter your choice[1/2/3/4]: 4

[Exiting]