Experiment 6: Write a program to create a list of student's records and search a student record using a dictionary.

CODE:

```
class Student:
def GetStudent(self):
        self.rollno=input("Enter roll number:")
        self.name=input("Enter name:")
        self.physicsMarks=int(input("Enter Physics Marks:"))
        self.chemistryMarks=int(input("Enter Chemistry Marks:"))
        self.mathsMarks=int(input("Enter Maths Marks:"))
        return(self.rollno)
        def PutStudent(self):
                print(self.rollno,self.name,((self.physicsMarks+self.chemis
                tryMarks+self.mathsMarks)/3))
        def Search(self,min,max):
                per=(self.physicsMarks+self.chemistryMarks+self.maths
                Marks)/3
                if(per>=min and per<=max):
                        return True
                else:
                        return False
studentDict=dict()
n=int(input("How many students you want to input:"))
for i in range(n):
        S=Student()
        rollno=S.GetStudent()
        studentDict.setdefault(rollno,S)

#SEARCHING FOR STUDENT RECORDS WITH ROLL
NUMBERS PEOVIDED BY THE USER
rollno=input("enter the roll number you want to search?:")
S=studentDict.get(rollno,"Not Found!")
if(isinstance(S,Student)):
        S.PutStudent()
```

```
else:
    print(S)

#PRINTNG RECORDS OF ALL USERS WITH MARKS
GREATER THAN 60%
print("All students who scored more than 60% are:")
gradeAStudent=list(filter(lambda s:s.Search(60,
    100),studentDict.values()))
if(len(gradeAStudent)==0):
    print("Record Not Found!")
else:
    for S in gradeAStudent:
        S.PutStudent()
```

OUTPUT:

```
How Many Students you want to Input? : 3
Enter Roll No : 12
Enter name: aakash
Enter Physics Marks:78
Enter Chemistry Marks: 69
Enter Maths Marks: 79
Enter Roll No : 13
Enter name: manik
Enter Physics Marks:68
Enter Chemistry Marks: 79
Enter Maths Marks: 89
Enter Roll No : 14
Enter name: raghav
Enter Physics Marks:78
Enter Chemistry Marks: 86
Enter Maths Marks: 68
Enter Roll Number you want to Search? : 13
13 manik 79
All students who scored more than 60 percentage are :
12 aakash 75
13 manik 79
14 raghav 77
```