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Class & Section: IT-3B

Subject: ARTIFICAL INTELLIGENCE

Course Teacher: MISS AQSA

LAB # 1

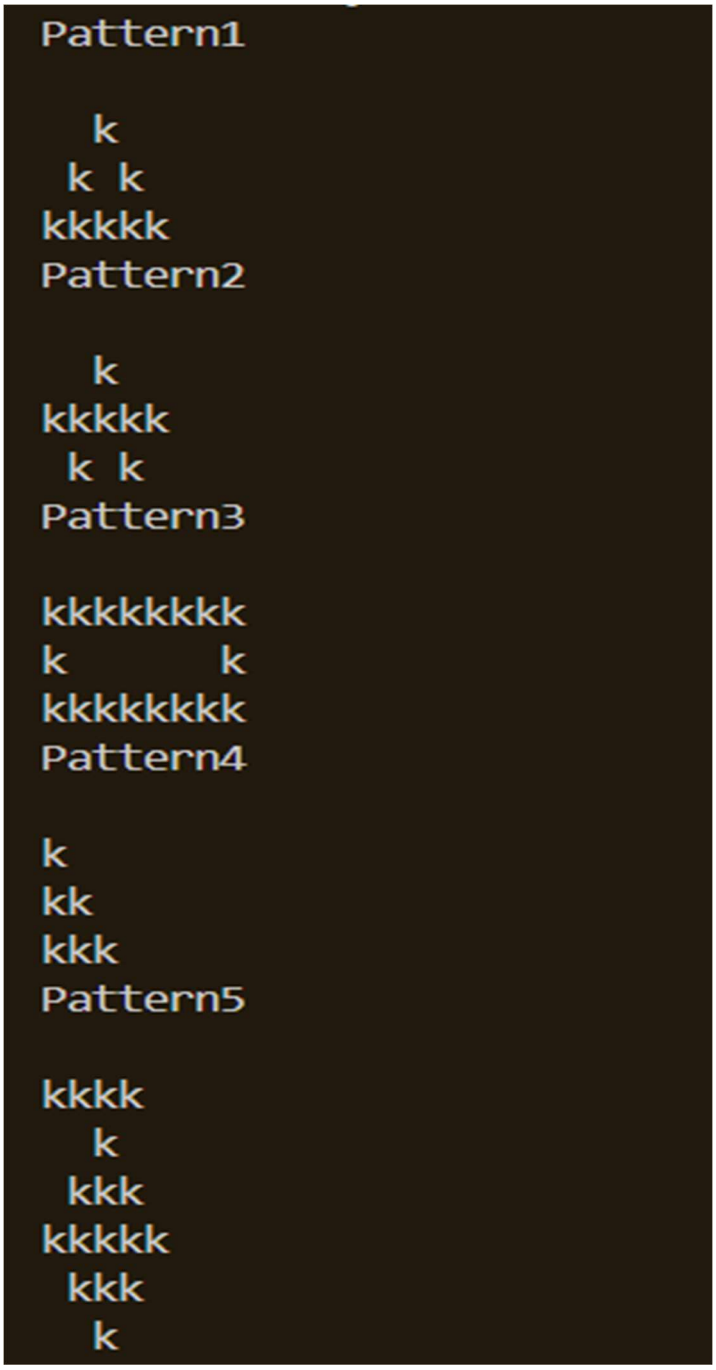
Task No. 1

MAKE 5 PATTREN PROGRAM BY USING STRING

INPUT:

```
print("Pattern1\n")
string1="k"
print("  k")
print(" k k")
print(5*string1)
print("Pattern2\n")
print("  k  ")
print(5*string1)
print(" k k")
print("Pattern3\n")
print(8*string1)
print("k      k")
print(8*string1)
print("Pattern4\n")
print(string1)
print(2*string1)
print(3*string1)
print("Pattern5\n")
print(4*string1)
print("  k")
print(" kkk")
print("kkkkk")
print(" kkk")
print("  k")
print("Pattern6\n")
print(5*string1)
print("k   k")
print(5*string1)
```

OUTPUT:


Pattern1
k
k k
kkkkk
Pattern2
k
kkkkk
k k
Pattern3
kkkkkkkk
k k
kkkkkkkk
Pattern4
k
kk
kkk
Pattern5
kkkk
k
kkk
kkkkk
kkk
k

TASK 2

MAKE TWO PROGRAM OF EACH DATA TYPE.

INPUT:

```
print("Data Types")
print("Numberic Type")
print("**INT**")
a=102
b=126
sum=a+b
print(sum)
a=10
b=12
c=2
mean=a+b
print(mean/c)
print("\n")
print("**Float**")
a=1.1
b=6.3
M=a*b
print(M)
a=2.9
b=3.9
print(a+b)
print("\n")
print("**Complex**")
a=2
b=8j
print(a+b)
a=15
b=13
c=2j
sum=a+b
print(sum*c)
print("\n")
print("BOOLEAN Type")
num=bool(False)
print(num)
num1=bool(True)
print(num1)
print("\n")
print("SET TYPE")
numbers={'1','2','3','4','5','6'}
print(numbers)
num={'1','5','4','3','2'}
print(num)
print("\n")
print("MAPPING Type")
print("**DICT**")
dict={"Komal":87,"Ranii":98}
print(dict)
dict1={"Name":"Tariq","Age":47,"Department":"Business"}
print(dict1)
print("\n")
print("SEQUENCE TYPE")
print("**STR**")
str ="Hi World"
print(str)
str1="KOMAL"
print(str1)
print("\n")
print("**LIST**")
str="alex"
int=1232
float=1.231
print(str,int,float)
fruits=["banana","orange","mango"]
fruits.append("pineapple")
print(fruits)
print("\n")
print("**TUPLE**")
tuple=("1","2","3","4")
print(tuple)
tuple1=("apple","banana","pineapple","orange")
print(tuple1[0],tuple1[1])
```

OUTOUT:

```
Data Types
Numberic Type
**INT**
228
11.0


**Float**
6.930000000000001
6.8


**Complex**
(2+8j)
56j


BOOLEAN Type
False
True


SET TYPE
{'5', '4', '2', '6', '3', '1'}
{'5', '4', '2', '3', '1'}


MAPPING Type
**DICT**
{'Komal': 87, 'Ranii': 98}
{'Name': 'Tariq', 'Age': 47, 'Department': 'Business'}
SEQUENCE TYPE
**STR**
Hi World
KOMAL


**LIST**
alex 1232 1.231
['banana', 'orange', 'mango', 'pineapple']


**TUPLE**
('1', '2', '3', '4')
apple banana
```