Student Name: M. Sheheryar

Student ID: BIT-23F-042

Department: Information Technology

Class & Section: IT-3B

Subject: ARTIFICAL INTELLIGENCE

Course Teacher: MISS AQSA

LAB # 1

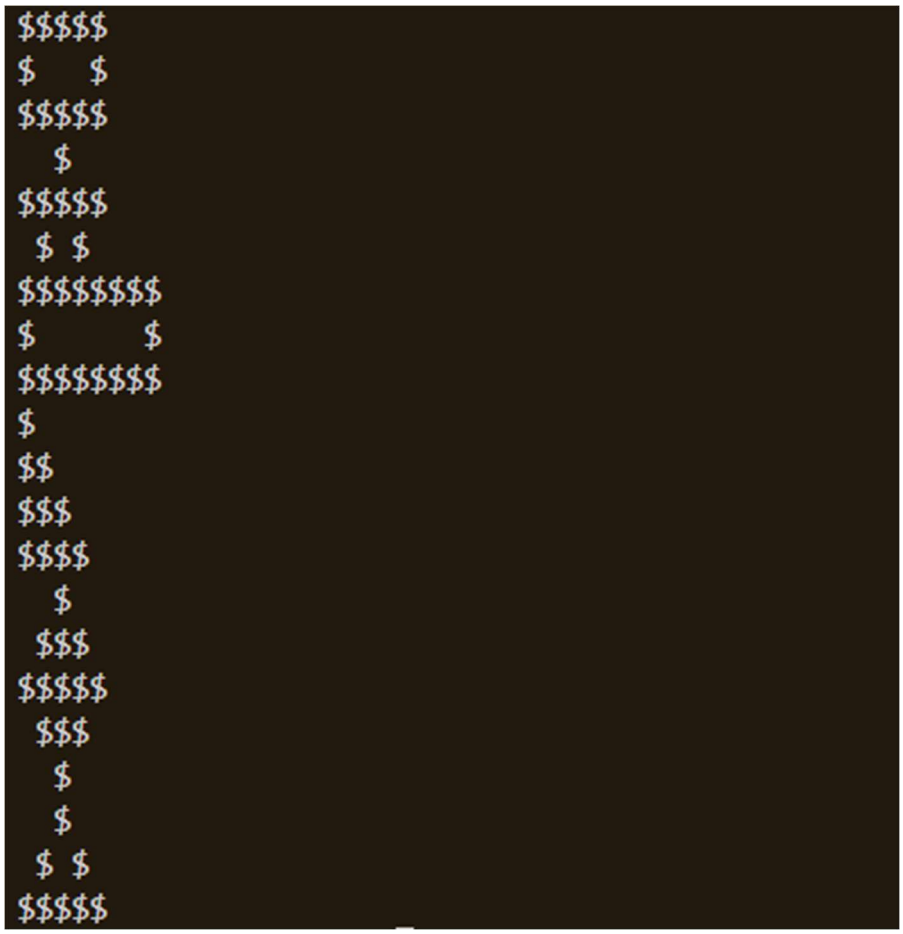
Task No. 1

MAKE 5 PATTREN PROGRAM BY USING STRING

INPUT:

```
# Pattern1
string1="$"
print(5*string1)
print("$   $")
print(5*string1)
# Pattern2
print("  $  ")
print(5*string1)
print(" $ $")
# Pattern3
print(8*string1)
print("$      $")
print(8*string1)
# Pattern4
print(string1)
print(2*string1)
print(3*string1)
print(4*string1)
# Pattern5
print("  $")
print(" $$$")
print("$$$$$")
print(" $$$")
print("  $")
```

OUTPUT:



TASK 2

MAKE TWO PROGRAM OF EACH DATA TYPE.

INPUT:

```
print("Data Types")
print("Numberic Type")
print("**INT**")
a=10
b=12
sum=a+b
print(sum)
a=100
b=112
c=2
mean=a+b
print(mean/c)
print("\n")
print("**Float**")
a=1.11
b=2.33
M=a*b
print(M)
a=2.09
b=3.099
print(a+b)
print("\n")
print("**Complex**")
a=12
b=3j
print(a+b)
a=13
b=14
c=4j
sum=a+b
print(sum*c)
print("\n")
print("BOOLEAN Type")
age=bool(False)
print(age)
age=bool(True)
age=bool(True)
print(age)
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={"sherry":87,"Sheheryar":98}
print(dict)
dict1={"Name":"Sheheryar","Age":20,"Department":"IT"}
print(dict1)
print("\n")
print("SEQUENCE TYPE")
print("**STR**")
str ="Hello World"
print(str)
str1="I am Sheheryar"
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])
```

OUTPUT:

```
Data Types
Numberic Type
**INT**
22
106.0


**Float**
2.5863000000000005
5.189


**Complex**
(12+3j)
108j


BOOLEAN Type
False
True


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


MAPPING Type
**DICT**
{'sherry': 87, 'Sheheryar': 98}
{'Name': 'Sheheryar', 'Age': 20, 'Department': 'IT'}

SEQUENCE TYPE
**STR**
Hello World
I am Sheheryar


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


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