INDIAN SCHOOL AL WADI AL KABIR

Class: VIII	Department : Computer Science	Year :2024-2025
WORKSHEET No:3	Topic: PYTHON CONTROL STRUCTURE-PROGRAMS	

1. # Python Program to Check whether the number is divisible by 5 or not using If-else Statement

```
x = int(input("Enter the number to check"))
if (x % 5 == 0):
    print ("The  number is divisible by 5")
else:
     print ("The number is not divisible by 5")
```

2. # Python program to find the factorial of a number provided by the user.

```
#To take input from the user
num = int(input("Enter a number: "))
factorial = 1
# check if the number is negative, positive or zero
if num < 0:
   print("Sorry, factorial does not exist for negative numbers")
elif num == 0:
   print("The factorial of 0 is 1")
else:
   for i in range(1,num + 1):
        factorial = factorial*i
   print("The factorial of",num,"is",factorial)
```

3. Write a program using while loop in python to print the multiplication table of 25

```
# Multiplication table in Python  using while loop
num = int(input("Enter the number : "))
i = 1
# using while loop to iterate multiplication 10 times
print("Multiplication Table : ")
while i<=10:
   num = num * 1
   print(num,'x',i,'=',num*i)
   i += 1
```

4. #Multiplication table using for loop
```python
num=int(input("Display multiplication table of?"))
# Iterate 10 times from i = 1 to 10
for i in range(1,11):
print(num, 'x', i, '=', num*i)
```

5. #Write a program to enter the age of a person and find out whether he is retired or not.
```python
age = int(input("Enter you age: "))
if age >= 60:
print("You are retired as you are above 60 ")
else:
print("You are not retired as you are below 60")
```

6. #A school has the following rules for the grading system. Write a program to enter the marks and print the corresponding grade in python.
   Below 20-F   20 to 40 -E   40 to 60 -D
   60 to 80- C   80 to 90 -B   Above 90-A
```python
marks=int(input("enter the marks"))
if marks<20:
    print("the grade is: F")
elif 40>=marks and marks>=20:
    print("the grade is: E")
elif 60>=marks and marks>=41:
    print("the grade is: D")
elif 80>=marks and marks>=61:
    print("the grade is: C")
elif 90>=marks and marks>=81:
    print("the grade is: B")
elif 91<=marks:
    print("the grade is: A")
else:
    print("Invalid entry")
```

7. #Program to print even numbers using while loop
```python
i = 0
while i <=20:
  print(i)
  i+=2
```

8. #program to print all the days of the week
```python
days=("Monday", "Tuesday", "Wednesday" ,"Thursday", "Friday", "Saturday", "Sunday")
For x in days:
```

```
    print(x)
9.  #Write a program to check the greatest of three numbers
    #Take input or three number to compare
    n1=int(input("Enter the Number1:"))
    n2=int(input("Enter the Number2:"))
    n3=int(input("Enter the Number3:"))
    if n1>n2:
        if n1>n3:
          print(n1, " - Number1 is greater")
        else:
            print(n3, " - Number3 is greater")
    else:
        if n2>n3:
            print(n2, " - Number2 is greater")
        else:
            print(n3, " - Number3 is greater")
10.#Program to create a pattern using for loop
    for a in range(1,10):
        print("*" *a)
```