Practical – 2 : Basic Python Programming

1) Write a python program to print “Welcome to UVPCE”.

CODE :-

```
print(21012011074)
print("Welcome to UVPCE")
```

OUTPUT :-

```
21012011074
Welcome to UVPCE
```

2) Write a python program which takes student information such as Name, Enrollment Number, Branch, Age, Email and Mobile number from user and print as following:

**"==========
====="**

Your Name
Your Enrollment No.
Branch: CE/IT
Age:XX years Email:your mail ID Mobile No: your No.

**"==========
===="**

CODE :-

```
print(21012011074)
name=input("Your Name:")
Enroll=int(input("Your Enrollment No."))
Branch=input("Branch CE/IT:")
Age=int(input("Enter your age:"))
Email=input("Enter your Email:")
Mob=int(input("Enter your Mobile_No:"))
print("\n----------\n----------")
print("Your Name:",name)
print("Your Enrollment No:",Enroll)
print("Your Branch:",Branch)
print ("Your age:",Age)
print ("Your Email:",Email)
print ("Your Mobile_No:",Mob)
print("----------\n----------")
```

OUTPUT :-

```
21012011074
Your Name:Guru Tulsibhai Patel
Your Enrollment No.21012011074
Branch CE/IT:CE
Enter your age:18
Enter your Email:gurupatel21@gnu.ac.in
Enter your Mobile_No:8200297639

----------
----------
Your Name: Guru Tulsibhai Patel
Your Enrollment No: 21012011074
Your Branch: CE
Your age: 18
Your Email: gurupatel21@gnu.ac.in
Your Mobile_No: 8200297639
----------
----------
```

3) Write python programs to evaluate the following expressions to demonstrate the use of operator precedence and associativity.

12 + 3 - 4 / 2 < 3 + 1
X = (10 * 2) % 2 << 4

CODE :-

```
print(21012011074)
print(12 + 3 - 4 / 2 < 3 + 1)
x= (10 * 2) % 2 << 4
print(x)
```

OUTPUT:

```
21012011074
False
0
```

4) Write a python program to display data types of different variables.

CODE :-

```
print(21012011074)
a = 1
b = True
c = "Harry"
d = complex(8, 2)
e = 3.14
f=[1,3.3,5+6]
g={1,2.2,3+4}
h={1:'guru',2:'patel'}
i = ("Geeks", "for", "Geeks")

print("The type of a is ", type(a))
print("The type of b is ", type(b))
print("The type of c is ", type(c))
print("The type of d is ", type(d))
print("The type of e is ", type(e))
print("The type of f is ", type(f))
print("The type of g is ", type(g))
print("The type of h is ", type(h))
print("The type of i is ", type(i))
```

OUTPUT :-

```
21012011074
The type of a is  <class 'int'>
The type of b is  <class 'bool'>
The type of c is  <class 'str'>
The type of d is  <class 'complex'>
The type of e is  <class 'float'>
The type of f is  <class 'list'>
The type of g is  <class 'set'>
The type of h is  <class 'dict'>
The type of i is  <class 'tuple'>
```

5) Write a python program to check given character is a vowel or not.

CODE :-

```
print(21012011074)
a=input("Enter a character:")
if (a=='A' or a=='E' or a=='I' or a=='O' or a=='U' or a=='a' or a=='e' or a=='i' or a=='o' or
a=='u') :
   print("It's a Vowel")
else:
   print("It's a Consonant")
```

OUTPUT:

```
21012011074
Enter a character:G
It's a Consonant
```

6) Write a python program to for library charges a fine for books returned late. Following are the fines:

First five days: 40 paisa per day. Six to ten day: 65 paisa per day.
Above ten days: 80 paisa per day

CODE :-

```
print(21012011074)
print('''-----Late Submission Charge-----
First five days: 40 paisa per day.
Six to ten day: 65 paisa per day.
Above ten days: 80 paisa per day
--------------------------------''')
x=int(input("Enter the day of submission:"))
y=x-31
if(y>0 and y<=5 and x>31):
    print("Your are",y,"days Late")
    print("As per Guidelines Your total charge is:",40*y,"paisa")

elif(y>5 and y<=10 and x>31):
    print("Your are",y,"days Late")
    print("As per Guidelines Your total charge is:",65*y,"paisa")

elif(y>10 and x>31):
    print("Your are",y,"days Late")
    print("As per Guidelines Your total charge is:",80*y,"paisa")

else:
    print("Your are under timeline So you don't have to pay any charges")
```

OUTPUT :-

```
21012011074
-----Late Submission Charge-----
First five days: 40 paisa per day.
Six to ten day: 65 paisa per day.
Above ten days: 80 paisa per day
--------------------------------
Enter the day of submission:80
Your are 49 days Late
As per Guidelines Your total charge is: 3920 paisa
```

7) Write a python program to count odd numbers from given three numbers and display maximum odd number.

CODE :-

```
print(21012011074)
x=[2,63,9,69,98,200,49,78,79,11]
count=0
max=x[0]
for i in range(10):
    if(x[i]%2!=0):
        count=count+1
        if(max<x[i]):
            max=x[i]
print("No of odd numbers :",count)
print("Maximum Number :",max)
```

OUTPUT:

```
21012011074
No of odd numbers : 6
Maximum Number : 79
```

8) Enter the following statements into the interpreter and note which ones produce an error, give reason for error:

1. **str1 = "welcome" print (str1*2)**

CODE :-

```
print('21012011074')
str1 = "welcome"
    print (str1*2)
```

OUTPUT :-

```
  File "C:\Users\gurup\AppData\Local\
    print (str1*2)
    ^
IndentationError: unexpected indent
```

2. **15 % 12**

CODE :-

```
print('2101201
1074')
print(15%12)
```

OUTPUT :-

```
Out[11]: 3
```

3. **print (18.0 // 4)**

CODE :-

```
print('2101201107
4')
print(18.0 // 4)
```

OUTPUT:

```
21012011074
4.0
```

4. **7<=7**

CODE :-

```
print('2101201107
4')
print(7 <= 7)
```

OUTPUT:

```
21012011074
True
```

5. -1<>-1.0

CODE :-

```
print('21012011074')
print(-1 <> -1.0)
```

OUTPUT :-

```
  File "C:\Users\gurup\AppData\L
    -1<>-1.0
      ^
SyntaxError: invalid syntax
```

6. -5 is -5.0

CODE :-

```
print('21012011074') print(-5 is -5.0)
```

OUTPUT:

```
21012011074
<>:14: SyntaxWarning: "is" with a literal. Did you mean "=="?
<>:14: SyntaxWarning: "is" with a literal. Did you mean "=="?
C:\Users\gurup\AppData\Local\Temp\ipykernel_19780\1505663641.py:14: SyntaxWarning: "is" with a literal.
  -5 is -5.0
6]: False
```

7. print('Steve's " Laptop"')

CODE :-

```
print(21012011074)
print('Steve's "Laptop"')
```

OUTPUT:

```
21012011074
Steve's " Laptop"
```