

P.1: variable example**# Write a program to demonstrate variables and addition**

```
x=100
y=200
print(x+y)
```

P.2: program to demo. Input**# Write a program of simple interest**

#input values

```
p=int(input(""))
r=int(input("Enter r : "))
t=int(input("Enter t : "))
```

#calculation

```
ans=p*r*t/100
```

#output

```
print("Interest : ",ans)
```

P.3: user defined function**# Write a program to add two values using user defined function**

```
def doAdd(v1,v2):
    return(v1+v2)
```

```
a=10
b=20
c=doAdd(a,b)
print(c)
```

P.4: if statement**# Write a program to check whether the person can get driving license or not from age input**

```
a=int(input("Enter age : "))
if(a>=18):
    print("You can get driving lic.")
else:
    print("You can not get drv. lic.")
```

P.5: if statement**# Write a program to calculate the grade from given conditions.**

program to get grade from per

```
# 70+    A
# 60+    B
# 50+    C
# 33+    Pass
# <33    Fail
```

```
per=int(input("Enter your percentage : "))
```

```
if(per<33):
    print("Fail")
elif(per<50):
    print("Pass")
elif(per<60):
    print("Grade C")
elif(per<70):
    print("Grade B")
else:
```

```
print("Grade A")
```

P.6: while loop example**# Write a program to enter values using while loop**

```
a=int(input("Enter the number:"))

while(a<=10):
    a=int(input("Enter the number:"))
    print("Your number is : ",a)
    print("Loop is good")

print("Thank you")
```

P.7: for loop**# Write a program for multiplication table**

```
a=int(input("Enter number for multiplication table : "))
for i in range(1,11):
    print(i,"x",a,"=",i*a)
```

P.8: Find largest among three numbers**# Write a program to find largest value among three numbers**

```
a=int(input("Enter value 1 : "))
b=int(input("Enter value 2 : "))
c=int(input("Enter value 3 : "))

if(a>b):
    if(a>c):
        print("Value of a is biggest")
    else:
        print("Value of c is biggest")
else:
    if(b>c):
        print("Value of b is biggest")
    else:
        print("Value of c is biggest")
```

P.9-A: Find largest among three numbers (Advance)**# Write a program to find largest value among three numbers**

```
a=int(input("Enter value 1 : "))    #50
b=int(input("Enter value 2 : "))    #20
c=int(input("Enter value 3 : "))    #80
d=0

if(a>b):
    if(a>c):
        d=a
    else:
        d=c
else:
    if(b>c):
        d=b
    else:
        d=c

print("The value ",d," is largest among ",a,b,c)
```

P.10: Write a program to count currency notes for given amount and note value

```
note=int(input("Enter note value : "))
amt=int(input("Enter amount : "))
count_amt=0
c=0
while(count_amt<amt):
    c=c+1
    count_amt=count_amt+note

print("Total notes required = ",c)
```

P.9-B Program to find bigger value among two integer

```
a=0
b=0

a=int(input("Enter number 1 : "))
b=int(input("Enter number 2 : "))

if(a>b):
    print(" a   is bigger")
else:
    print(" b   is bigger")
```

P.11: Math Module

#Write a program to demonstrate math module: pow, log10 etc

```
import math
print(dir(math))
print(math.pow(5,3))
print(math.log10(500))
```

P.12: Random module

Random numbers in python

```
import random as R

print("Random number between 0 and 1")
r1=R.random()
print("r1 = ",r1)

print("Random number between 0 and 100")
r2=R.random()*100
print("r1 = ",r2)
```

```
print("Random number between 20 and 50")
r3=R.randrange(20,50)
print(r3)

print("Random number between 20 and 50 with step 4")
r3a=R.randrange(20,50,4) #takes as 20,24,28,32,...48.
print(r3a)

print("Random number from list")
r4=R.choice( [5,10,15,20,25] )
print("r1 = ",r4)

print("Even int random number")
r_any=R.random()*100 #any random upto 100
if(int(r_any) % 2 == 0):
    r_ev=int(r_any)
else:
    r_ev=int(r_any)+1 #if r_any is odd, add 1 to make it even. :p
print("Even random number = ",r_ev)
```

P.13: multiplication using UDF (user defined function)

```
def multiplytwo(a,b):
    return(a+b)

a=int(input("Enter value 1 : "))
b=int(input("Enter value 2 : "))

c=multiplytwo(a,b)

print("Multiplication = ",c)
```

P.14: Example of logical operators

```
a=True
b=False
c=False
if a or b and c:
```

```
print('A')
else:
    print('B')
#output
#A
```

P.15: KM-Mile conversion

```
km=input()
mile=int(km)*1.6

print("Km   = ",km)
print("Mile = ",mile)
```

P.16: Program to enter name and age and display

```
#####Input from user#####
nm=input("Enter Name : ")
age=input("Enter Age : ")
#####Now print#####
print("Hello ",nm)
print("Your Name is ",age)
```

P.17: Leap year check

```
y=int(input("Enter year number [0-9999]: "))
if(y>0 && y<=9999):
    if(y % 4 == 0):
        print("This is leap year")
    else:
        print("This is not a leap year")
else:
    print("Invalid year value. Only 0 to 9999 is valid.")
```

P.18: Simple password logic

```
nm=input("Enter your Password : ")
if(nm == "Einstein1234"):
    print("Password matched.")
```

```
else:
    print("Password not matched.")
```

P.19: Multiplication table for given number

```
z=int(input("Enter number : "))

for i in range(1,11):
    print(i," x ", z , " = ", i * z)
```

P.20-A: Display data of MySQL table with Python

```
import mysql.connector as con

db=con.connect(host='localhost',user='root',password='',database='dkm')

cur=db.cursor()

cur.execute("select * from prods")

tb=cur.fetchall()

print("P name --- Price ")
for r in tb:
    print(r[1], ' --- ', r[2])
```

P.20-B: Display data of MySQL table with Python (Formatted output)

```
import mysql.connector as con

db=con.connect(host='localhost', user='root', passwd='', database='dkm')

cur=db.cursor()

cur.execute("select * from prods")

tb=cur.fetchall()

#a=input("Enter pid to find : ")

print("|%5s | %10s | %10s |"%('PID','Name','Co.'))
print("-----")
for r in tb:
    print("|%5s | %10s | %10s |"%(r[0],r[1],r[3]))

print("-----")
```