**PYTHON ASSIGNMENT- 1(Basics)**

**Name**=Karan Dilip Kadam

**Q1)** **Percentage of 5 subjects**

**Program =**

p=int(input("enter python marks="))

c=int(input("enter c marks="))

cp=int(input("enter c++ marks="))

j=int(input("enter java marks="))

d=int(input("enter dbms marks="))

percentage=(p+c+cp+j+d)/500\*100

print("percentage of student= ",percentage)

**Q2) Area of Rectangle**

**Program=**

l=int(input("enter length= "))

b=int(input("enter bredth= "))

area=2\*(l+b)

print("area of rectangle=",area)

**Q3) If Area of room is 144 sq m. then how many tiles of size 12\*12 sq cm will be required to cover the flooring of room.**

**Program**=

Area=14000  #cause 1m=100cm

length=12

breadth=12

area\_of\_onetile= length\*breadth

print("area of onetile= ",area\_of\_onetile,"cm^2")

num\_of\_tiles=Area/area\_of\_onetile

print("number of tiles are= ",num\_of\_tiles)

**Q4) If there are 20 students who like football, 30 students like badminton and 10 like both. there are 20 who are not intrested if any of the games. how many total number of students are there?**

**Program=**

football=20

badminton=30

both=10

not\_intrested=20

total\_football=football-both

total\_badminton=badminton-both

total\_students=total\_football + total\_badminton + not\_intrested

print("total students are= ",total\_students)

**Q5) Convert the time in seconds**

**Program=**

hh=int(input("enter time in hours= "))

mm=int(input("enter time in minutes= "))

ss=int(input("enter time in seconds= "))

time\_in\_seconds= hh\*3600 + mm\*60 + ss

print("time entered in seconds is= ",time\_in\_seconds)

**Q6) Convert Celsius to Fahrenheit**

**Program=**

celsius=int(input("enter temprature in celsius= "))

fahrenheit=(celsius\*9/5)+32

print("temprature in fahrenheit= ",fahrenheit,"far")

**Q7) Convert distance given in feet & inches into meter and centimeter**

**Program=**

feet= int(input("enter distance given in feet= "))

inch= int(input("enter distance given in inch= "))

meter= feet\*0.3048

centimeter= inch\*2.54

print("distance in meter=",meter,"m", "and centimeter=",centimeter,"c")

**Q8) Calculate area of triangle**

**Program=**

base=int(input("enter base="))

height=int(input("enter height="))

area=1/2\*(base\*height)

print("area of triangle= ",area,"cm^2")

**Q9) Calculate selling price of book based on cost price and discount**

**Program=**

cost\_price=int(input("enter cost price= "))

discount=int(input("enter dicount= "))

selling\_price=cost\_price\*(100-discount)/100

print("selling price is= ",selling\_price)

**Q10) Calculate total salary of employee based on basic, da=10% of basic, ta=12% of basic and hra=15% of basic**

**Program=**

basic=float(input("enter basic salay= "))

da=float(basic\*0.10) #da=10% of basic

ta=float(basic\*0.12) #ta=12% of basic

hra=float(basic\*0.15) #hra=15% of basic

total\_salary=float(basic+da+ta+hra)

print("total salary= ",total\_salary)

**Q11) Find sum of three digit number**

**Program=**

Approach 1)

num=int(input("enter three dig num="))

w=num//10

x=w//10

y=w%10

z=num%10

sum=x+y+z

print("sum of digits= ",sum)

Approach 2)

num=int(input("enter three dig num="))

sum=0

sum+=num%10

num //=10

sum+=num%10

num //=10

sum+=num%10

num //=10

print("sum of digits= ",sum)

**Q12) Assign two nums and swap it using third variable**

**Program=**

a=int(input("enter a= "))

b=int(input("enter b= "))

print("before swapping a and b= ",a,b)

temp=a

a=b

b=temp

print("after swapping a and b= ",a,b)

**Q13) Assign two nums and swap it without using third variable**

**Programs=**

a=int(input("enter a= "))

b=int(input("enter b= "))

print("before swapping a and b is=",a,b)

a,b=b,a

print("after swapping a and b is= ",a,b)

**Q14) Reverse Three digit nums**

**Programs=**

number=int(input("enter no= "))

reverse=0

while(number>0):

   reverse=(reverse\*10)+(number%10)

   number=number//10

print("reverse no of",number,"is=",reverse)

**Q15) Accept an integer amount from user and tell minimum number of notes needed for representing that amount**

**Program=**

Approach-1)

amount=int(input("enter amount= "))

notes=[2000,500,200,100,50,20,10,5,1] #num of notes

notesCheaker=[0,0,0,0,0,0,0,0,0]   #notesCounter

print("currency count= ")

for i,j in zip(notes,notesCheaker): #i for notes ,j for num of notes

    if amount>=i:

        j=amount//i

        amount=amount-j\*i

        print(i," = ",j)

Approach-2)

amount=int(input("enter amount= "))

no\_of\_notes=0

no\_of\_notes=amount//2000

amount=amount%2000

no\_of\_notes+=amount//500

amount=amount%500

no\_of\_notes+=amount//200

amount=amount%200

no\_of\_notes+=amount//100

amount=amount%100

no\_of\_notes+=amount//50

amount=amount%50

no\_of\_notes+=amount//20

amount=amount%20

no\_of\_notes+=amount//10

amount=amount%10

print("number of notes are= ",no\_of\_notes)