**Assignments:**

1. **Take the input from the user for(Total number of people,Number of seats for bus. Based on two inputs**

a=int(raw\_input("Enter Total number of people:"))

b=int(raw\_input("Number of seats for a bus:"))

c=a/b

print "Required buses are:",c

1. **Take temperature from the user and convert foreign heat -> Celsius.**

f=float(raw\_input("Enter Tempurature in Fahrenheit:"))

cs = (f - 32)\*5/9

print "Tempurature in celsius:",cs

1. **Take temperature from the user and convert Celsius → foreign heat**

*c=float(raw\_input("Enter Tempurature in celsius:"))*

*fh = (c \* 9/5) + 32*

*print "Tempurature in celsius:",fh*

1. **Take four number from the user and Do the below operations**

# Entering four numbers:

*a=int(raw\_input("Enter first number:"))*

*b=int(raw\_input("Enter first number:"))*

*c=int(raw\_input("Enter first number:"))*

*d=int(raw\_input("Enter first number:"))*

**I, (a+b)\*\*2, (c+d)\*\*3**

*ab=(a+b)\*\*2*

*bc=(c+d)\*\*2*

*print ("The Result of (a+b)\*\*2 is:"),ab*

*print ("The Result of (c+d)\*\*2 is:"),bc*

**II, variance**

**standard deviation: sqrt(variance): User math module. Math.sqrt(variance)**

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**III, Regression**

**y=mx+b**

**All a,b,c,d are consider as (x1,x2,x3,x4)**

**m=1.23**

**b=0.045**

**find out y**

**y=m\*(x1+x2+x3+x4)+b**

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**IV, Find the average of four numbers**

*avg=((float(a)+float(b)+float(c)+float(d))/4)*

*print (“The average of 4 numbers are: “),avg*

**V, Find the sum of four numbers**

*sum=(a+b+c+d)*

*print ("Average of 4 numbers are:"),sum*

1. Take the distance in km and show that in cm, meters, in milli meters, cents, feets
   * 1. **Taking distance input as in km convert to cm:**

*a=float((raw\_input("Enter the distance in km:")))*

*cm=(a/10000)*

*print ("Distance in cm:"),cm*

* + 1. **Taking distance input as in km convert to meters:**

*a=float((raw\_input("Enter the distance in km:")))*

*m=(a\*1000)*

*print ("Distance in cm:"),m*

* + 1. **Taking distance input as in km convert to milli meters**

*a=float((raw\_input("Enter the distance in km:")))*

*mm=(a\*1000000)*

*print ("Distance in Milli Meters:"),mm*

* + 1. **Taking distance input as in km convert to cents**
    2. **Taking distance input as in km convert to cents**

*a=float((raw\_input("Enter the distance in km:")))*

*c=a\*3280.84*

*print ("Distance in feets:"),c*

1. **Take the size of your hard disk in GB Show that in MB, KB, TB, PB**
   * 1. **Taking the size in GB and showing in MB**

*a=int(raw\_input("Enter the hard disk size in GBs:"))*

*m=a\*1024*

*print "The size of hard dis in MBs:",m*

* + 1. **Taking the size in GB and showing in KB**

*a=int(raw\_input("Enter the hard disk size in GBs:"))*

*k=a\*1024\*1024\*1024*

*print "The size of hard dis in TBs:",k*

* + 1. **Taking the size in GB and showing in PB**

*a=int(raw\_input("Enter the hard disk size in PBs:"))*

*k=a\*1024\*1024\*1024\*1024*

*print "The size of hard dis in TBs:",k*

1. **Take name, age, height from the user and print like below and The details of the person: Name:name of the person, Age:age of the person, Height:height of the person**

**Note: make sure that no space between : and a value and should be space after “COMA”**

*name=raw\_input("Enter the name of the person:")*

*age=raw\_input("Enter the age of the person:")*

*height=float(raw\_input("Enter the height of the person:"))*

*print "The details of the person: Name:%s , Age:%s , Height:%.1f" %(name , age , height)*

1. **BMI calculation: take required parameters for BMI calculation from the user and calculate BMI of the person**.

*Don’t know the formula*

1. **Take input as below and print output**

**name="Jayaram"**

**age=1.6**

**height=3.5356234**

**weight=10.343856783**

**By using above inputs print the output**

**Name:Jayaram, Age:1.6, Height:3.54, Weight:10.344**

**Note: Use format specifiers(%s, %d, %f)**

*name="Jayaram"*

*age=1.6*

*height=3.5356234*

*weight=10.343856783*

*print "name:%s , age:%s , height:%f , weight:%f" %(name , age , height , weight)*

1. **Take three lower case letters from the user convert in to upper case.**

*name=raw\_input("Enter your name in lower case:")*

*print "Your name in upper case:%s" %(name.upper())*

1. **Take three upper case letters from the user convert in to small case.**

*name=raw\_input("Enter your name in upper case:")*

*print "Your name in upper case:%s" %(name.lower())*

# Conditional statements

1. **Take the input from the user for(Total number of people, total number of buses, Number of seats for bus, adjust factor). Based on four inputs**

**Decide whether there is sufficient buses or not and give solution for how many extra buses required**

*np=int(raw\_input("Enter the number of people:"))*

*nb=int(raw\_input("Enter the number of buses:"))*

*ns=int(raw\_input("Enter the number of seats for a bus:"))*

*a=np/ns*

*if a>nb:*

*print "There is no suffcient buses there more buses required"*

*else:*

*print "There is suffcient buses available no more buses required"*

*print "Thank you"*

1. **Take number from the user decide whether it is even or odd**

*a=int(raw\_input("Enter a number:"))*

*b=a%2*

*if b==0:*

*print "The given number is even number"*

*else:*

*print "The given number is odd number"*

1. **Take number from the user decide whether it is positive number or negative number**

*a=int(raw\_input("Enter a number:"))*

*if a>0:*

*print "The given number is a possitive number"*

*else:*

*print "The given number is negative number"*

1. **Take a string from the user print the length. if the user not given anything then show an error message**

a=raw\_input("Enter any string:")

b=len(a)

if b!=0:

print "The given string is:",a

else:

print "You have entered a invalid string"

1. **code to perform mathematical operations. take two numbers from the user: 1. add, 2. sub, 3. mul, 4.div, 5.quit**

*print (" 1. add \n 2. sub \n 3. mul \n 4. div \n 5. quit")*

*a=int(raw\_input("Enter first number:"))*

*b=int(raw\_input("Enter second number:"))*

*c=int(raw\_input("Enter a value to perform the activity:"))*

*if c==1:*

*print"The addition of two numbers:",a+b*

*elif c==2:*

*print"The subtraction of two numbers:",a-b*

*elif c==3:*

*print"The multiplication of two numbers",a\*b*

*elif c==4:*

*print"The divition of two numbers:", a/b*

*elif c==5:*

*print"quit"*

1. show the menu:

1. kids

2. Men's

3. Women's

Show the corresponding message based on the selection. Mention error message if he enter >3.

*print (" 1. Kid's \n 2. Men's \n 3. Women's ")*

*c=int(raw\_input("Select the number to show the section:"))*

*if c==1:*

*print"This is Kids section:"*

*elif c==2:*

*print"This is Men's section:"*

*elif c==3:*

*print"This is Women's section"*

*else:*

*print"You have entered invalid selection"*

1. **write a program to chcek given substring is there in actual string or not?**

**example: act="python is a pure object oriented programing language"**

**Note: Use in operator**

*a=raw\_input("Enter the sentense: ")*

*if 'pure' in a:*

*print "The string is there in given sentence"*

*else:*

*print "The string is not there in given sentence"*

1. **Take three numbers from the user and decide which is big**

*a=int(raw\_input("Enter first number:"))*

*b=int(raw\_input("Enter Secund number:"))*

*c=int(raw\_input("Enter Third number:"))*

*if a>b and a>c:*

*print "Big number is: ",a*

*elif b>a and b>c:*

*print "Big number is:",b*

*elif c>a and c>b:*

*print "Bing number is:",c*

1. **Take age and gender from the user and decide whether he is eligible for marriage in India or not**

*gender=raw\_input("Please enter gender:")*

*age=int(raw\_input("Please enter your age:"))*

*if gender=='female' and age>=18:*

*print "Your eligible for merrage"*

*elif gender=='male' and age>=22:*

*print "Print your eligible for merrage"*

*else:*

*print "Your not eligible for merrage"*

1. **Take two number a,b from the user and check whether a is divisible by b or not**

*a=int(raw\_input("Enter a value:"))*

*b=int(raw\_input("Enter b value:"))*

*c=a/b*

*if c!=0:*

*print "A is divisable by b"*

*else:*

*print "A is not divisable by b"*

# looping statements:

1. Take a number from the user and check whether it is prime?
2. **Take a string from the user and check contains only digits or not?**

*name=raw\_input("Enter the string:")*

*count=0*

*t=list(name)*

*for i in t:*

*if i.isdigit():*

*count=count+1*

*if count==0:*

*print "Given string contains no digits"*

*else:*

*print "Given string contains %s digits"%(count)*

1. **Take a string from the user and check contains only alphabets or not?**

*name=raw\_input("Enter the string:")*

*count=0*

*t=list(name)*

*l=len(name)*

*for i in t:*

*if i.isdigit():*

*count=count+1*

*s=l-count*

*print "Given string lenth is: %s letters"%(l)*

*print "Given string contains %s digits"%(count)*

*print "Given string contains %s letters"%(s)*

1. **Take a string from the user and check contains only special chars or not?**

*name=raw\_input("Enter the string:")*

*sp="!@#$%()^&\*"*

*d=0*

*c=0*

*e=str("")*

*s=list(sp)*

*t=list(name)*

*l=len(name)*

*for i in t:*

*if i.isdigit():*

*d=d+1*

*else:*

*for j in s:*

*if i==j:*

*c=c+1*

*e=e+j*

*print "Given string contain %s special charectors and those are: %s"%(c,e)*

1. **Take a string from the user and check contains only capital letters or not?**

*name=raw\_input("Enter a string")*

*c=0*

*ch=str("")*

*l=list(name)*

*for i in l:*

*s=i.upper()*

*if s==i:*

*c=c+1*

*ch=ch+i*

*print("Given String contain capital %s letters and those are:%s"%(c,ch))*

1. **Take a string from the user and check contains only small letters or not?**

*name=raw\_input("Enter a string")*

*c=0*

*ch=str("")*

*l=list(name)*

*for i in l:*

*s=i.lower()*

*if s==i:*

*c=c+1*

*ch=ch+i*

*print("Given String contain lower case %s letters and those are:%s"%(c,ch))*

1. **Convert the total string in to lower case. Without using lower() function?**

*name=raw\_input("Enter the string")*

*cn=str("")*

*l=list(name)*

*for i in l:*

*c=ord(i)*

*s=chr(c-32)*

*cn=cn+s*

*print "The upper case of given string is:",cn*

1. Convert the total string in to upper case. Without using upper() function

*name=raw\_input("Enter the string")*

*cn=str("")*

*l=list(name)*

*for i in l:*

*c=ord(i)*

*s=chr(c+32)*

*cn=cn+s*

*print "The upper case of given string is:",cn*