**Python**

**2. Conditional Statements**

**12 .**

**ask user to enter name, age and address and let user know if user can do voting**

**Code:**

**name=input("enter the name: ")**

**age=input("enter the age: ")**

**age=int(age)**

**address=input("enter the address")**

**if(age>18):**

**print("eligible for vote")**

**else:**

**print("not eligible for vote")**

**O/P:**

**enter the name: om**

**enter the age: 19**

**enter the addresssatara**

**eligible for vote**

**13 .**

**ask user to enter number check if number is 0 or less than 0 or greater than 0**

**Code:**

**num=int(input("enter the number: "))**

**if(num==0):**

**print("number is zero")**

**elif(num>0):**

**print("number is greater zero")**

**else:**

**print("number is lesser than zero")**

**O/P:**

**enter the number: 4**

**number is greater zero**

**14 .**

**ask user to enter number if number is in 1s then print one, if number is in 10s then print ten if number is in 100s then print hundred if number is in 1000 print thousand. (try to implement this using if-elif-else**

**Code:**

**num=input("enter the number: ")**

**num=int(num)**

**if(1<=num<10):**

**print("1s number")**

**elif(11<=num<100):**

**print("10's number")**

**elif(100<=num<1000):**

**print("100's number")**

**elif(1000<=num<100000):**

**print("1000's number")**

**else:**

**print("too much number")**

**O/P:**

**enter the a 2**

**enter the b 5**

**enter the c 2**

**b is greater**

**16.**

**"""**

**get number from user and check if number is odd or even, multiply number by 2 is number is even and calculate square of the number if number is odd**

**"""**

**Code:**

**num=int(input("enter the number: "))**

**if(num%2==0):**

**print("number is even")**

**prod=num\*2**

**print("product of number is: ",prod)**

**else:**

**print("numer is odd")**

**prod = num \* num**

**print("square of even number is: ",prod)**

**O/P:**

**enter the number: 4**

**number is even**

**product of number is: 8**

**17.**

**get a number from user, write a program to check if number is prime number**

**Code:**

**num=int(input("enter the number: "))**

**i=2**

**count=0**

**while i<num:**

**if(num%i==0):**

**count=1**

**break**

**i+=1**

**if count==1:**

**print("composite")**

**else:**

**print("prime")**

**O/P:**

**enter the number: 5**

**prime**

**18.**

**get three sides of a triangle from user and check if that is a valid triangle**

**Code:**

**a=float(input("enter a side: "))**

**b=float(input("enter b side: "))**

**c=float(input("enter c side: "))**

**if(a+b>c) and (b+c>a) and (a+c>b):**

**print("Valid triangle")**

**else:**

**print("invalid triangle")**

**O/P:**

**enter a side: 3**

**enter b side: 5**

**enter c side: 7**

**Valid triangle**

**19.**

**get marks for a student and print grade (if < 30, fail, <50 third class, <60 second class, <70 first class, >=70 distinction, =100 then gold medal**

**Code:**

**mark=float(input("enter the marks/percentage: "))**

**if(mark<30):**

**print("fail")**

**elif(mark<50):**

**print("third class")**

**elif(mark<60):**

**print("second class")**

**elif(mark<70):**

**print("first class")**

**elif(mark>=70 and mark<99):**

**print("distinction")**

**elif(mark==100):**

**print("GOLD")**

**else:**

**print("invalid marks")**

**O/P:**

**enter the marks/percentage: 67**

**first class**

**20.**

**get a character from user and check if the character is number or vovel or conconent**

**Code:**

**c=input("enter the character: ")**

**if c in ['a','e','i','o','u']:**

**print("Vowel")**

**elif c.isdigit():**

**print("number")**

**else:**

**print("consonant")**

**O/P:**

**enter the character: e**

**Vowel**