Assignment

Coding Question

1. Write a program to display "Hello" if a number entered by user is a multiple of five , otherwise print "Bye".

```
a = int(input("Enter any positive number:"))
if a%5==0:
    print("Hello")
else:
    print("bye")
```

```
Enter any positive number:12
bye
```

2. Write a program to check whether a number is divisible by 7 or not.

```
b = int(input("Enter any positive number"))
if b%7==0:
    print("Number is divisible by 7")
else:
    print("Number is not divisible by 7")
```

```
Enter any positive number15
Number is not divisible by 7
```

3. Write a program to check whether a person is eligible for voting or not. (accept age from user)

```
Age = int(input("Enter your Age"))
if Age>18:
    print("Eligible for voting")
else:
    print("Not eligible for voting")
```

```
Enter your Age21
Eligible for voting
```

4. Write a program to check whether a number entered by user is even or odd.

```
Number = int(input("Enter any Number"))
if Number%2==0:
    print("No. is Even")
else:
    print("No. is odd")
```

```
Enter any Number2
No. is Even
```

5. Write a program to calculate the electricity bill (accept number of unit from user) according to the following criteria : Unit Price. First 100 units no charge Next 100 units Rs 5 per unit After 200 units Rs 10 per unit (For example if input unit is 350 than total bill amount is Rs2000)

```
n = int(input("Enter your used units"))
if n<=100:
    print("No Charge")
elif n>100 and n<=200:
    n=((n-100)*5)
    print("Your amount is",n)
elif n>200:
    n=((n-200)*10)+500
    print("Your amount is",n)
```

```
Enter your used units350
Your amount is 2000
```

6.Write a program to display the last digit of a number. (hint : any number % 10 will return the last digit)

```
Num = int(input("Enter a number"))
remainder = Num % 10
print("Remainder is", remainder)
```

```
Enter a number21
Remainder is 1
```

7.Write a program to accept percentage from the user and display the grade according to the following criteria:

Marks > 90 A > 80 and <= 90 >= 60 and <= 80 below 60 D

```
P = int(input("Enter your percentage"))
if P>90 and P==100:
    print("Your grade is A")
elif P>80 and P<=90:
    print("Your grade is B")
elif P>=60 and P<=80:
    print("Your grade is C")
elif P<60:
    print("Your grade is D")
else:
    print("Invalid percentage")
```

```
Enter your percentage90
Your grade is B
```

8.Write a program to accept the cost price of a bike and display the road tax to be paid according to the following criteria :

Cost price (in Rs) Tax

100000 15 %

50000 and <= 100000 10%

<= 50000 5%

```
A= int(input("Enter your Bike amount"))
if A==100000:
    A=(A*0.15)
    print("Your tax is",A)
elif A>50000 and A<=100000:
    A=(A*0.1)
    print("Your tax is",A)
elif A<=50000:
    A=(A*0.05)
    print("Your tax is",A)
```

```
Enter your Bike amount55000
Your tax is 5500.0
```

9.Write a program to check whether an years is leap year or not.

```
year = int(input("Enter year"))
if (year%400==0 and year%100==0):
    print("It is a leap year")
elif (year%100!=0 and year%4==0):
    print("It is a leap year")
else:
    print("This is not leap year")
```

```
Enter year2014
This is not leap year
```

10. Write a program to accept a number from 1 to 7 and display the name of the day like 1 for Sunday , 2 for Monday and so on.

```
a = int(input("Enter a number from 1 to7"))
if a==1:
    print("Monday")
elif a==2:
    print("Tuesday")
elif a==3:
    print("Wednesday")
elif a==4:
    print("Thrusday")
elif a==5:
    print("Friday")
elif a==6:
    print("Saturday")
```

```
elif a==7:
    print("Sunday")
else:
    print("Invalid number")
```

```
Enter a number from 1 to78
Invalid number
```

11.Accept any city from the user and display monument of that city.

City	Monument
Delhi	Red Fort
Agra	Taj Mahal
Jaipur	Jal Mahal

```
Monument = str(input("Choose any city: Delhi, Agra, Jaipur, Pune"))
if M=="Delhi":
    print("Famous Monument - Red Fort")
elif M=="Agra":
    print("Famous Monument - Taj Mahal")
elif M=="Jaipur":
    print("Famous Monument - Jal Mahal")
elif M=="Pune":
    print("Famous Monument - Shaniwar Wada")
```

```
Choose any city: Delhi, Agra, Jaipur, PunePune
Famous Monument - Shaniwar Wada
```

12.Write a program to check whether a person is senior citizen or not.

```
Age = int(input("Enter your age"))
if Age>=65:
    print("You are a senior citizen")
elif Age>0 and Age<65:
    print("You are not senior citizen")
```

```
Enter your age50
You are not senior citizen
```

13.Write a program to whether a number (accepted from user) is divisible by 2 and 3 both.

```
Number = int(input("Enter any number"))
if Number%2==0 and Number%3==0:
    print("Number is divisible by both 2 & 3")
else:
    print("Number not divisible by both 2 & 3")
```

```
Enter any number5
Number not divisible by both 2 & 3
```

14.Write a program to check whether a number (accepted from user) is positive or negative.

```
N = int(input("Enter ay number"))
if N>=0:
    print("The number is positive")
elif N<0:
    print("The number is negative")
```

```
Enter ay number96
The number is positive
```

15.Accept the age of 4 people and display the youngest one?

```
Age1 = int(input("Enter age of person 1"))
Age2 = int(input("Enter age of person 2"))
Age3 = int(input("Enter age of person 3"))
Age4 = int(input("Enter age of person 4"))
if Age1<Age2 and Age2<Age3 and Age3<Age4:
    print("Age1 is youngest")
elif Age2<Age3 and Age3<Age4 and Age2<Age1:
    print("Age2 is youngest")
elif Age3<Age2 and Age3<Age1 and Age3<Age4:
    print("Age3 is youngest")
elif Age4<Age2 and Age4<Age3 and Age4<Age1:
    print("Age4 is youngest")
```

```
Enter age of person 110
Enter age of person 220
Enter age of person 330
Enter age of person 440
Age1 is youngest
```

16.Write a program to check a character is vowel or not

```
ch = input("Please enter any character")
if (ch=='a' or ch=='e' or ch=='i' or ch=='o' or  ch=='u' or ch=='A' or ch=='E' or ch=='
    print("Given character is vowel")
else:
    print("Given character is not a vowel")
```

```
Please enter any characterh
Given character is not a vowel
```

17.Accept the following from the user and calculate the percentage of class attended: a. Total number of working days

b. Total number of days for absent

After calculating percentage show that, If the percentage is less than 75, than student will not be able to sit in exam.

```
a = int(input("Total no. of working days"))
b = int(input("Number of days absent"))
percentage=a-b/a*100
if percentage>=75:
    print("Allowed to sit in exam",percentage)
else:
    print("Not allowed to sit in exam", percentage)
```

```
Total no. of working days100
Number of days absent10
Allowed to sit in exam 90.0
```

18.Accept three sides of a triangle and check whether it is an equilateral, isosceles or scalene triangle. Note :

An equilateral triangle is a triangle in which all three sides are equal.

A scalene triangle is a triangle that has three unequal sides.

An isosceles triangle is a triangle with (at least) two equal sides.

```
a = input('')
b = input('')
c = input('')
if a==b==c:
    print("It is equilateral triangle")
elif a!=b!=c:
    print("It is scalene triangle")
else:
    print("It is isosceles triangle")
```

```
5
5
5
It is equilateral triangle
```

19.Accept the age, sex (‘M’, ‘F’), number of days and display the wages accordingly Age Sex Wage/day

=18 and <30 M 700 F 750 =30 and <=40 M 800 F 850

```
age = int(input("Enter your age"))
sex = input("Enter your sex, M or F")
n = int(input("Number of days worked"))
if age in range (18,31) and sex=='M':
    Wages = n * 700
    print("Total", Wages)
elif age in range (18,31) and sex=='F':
    Wages = n * 750
```

```
    print("Total", Wages)
elif age in range (30,41) and sex=='M':
    Wages = n * 800
    print("Total", Wages)
elif age in range (30,41) and sex=='F':
    Wages = n * 850
    print("Total", Wages)
```

```
Enter your age20
Enter your sex, M or FM
Number of days worked10
Total 7000
```

20.Accept three sides of triangle and check whether the triangle is possible or not. (triangle is possible only when sum of any two sides is greater than 3rd side)

```
a = input('')
b = input('')
c = input('')
if a+b>c or a+c>b or b+c>a:
    print("Triangle is possible")
else:
    print("Triangle is possible")
```

```
5
3
7
Triangle is possible
```