

Assignment3

June 7, 2022

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

```
[9]: print('enter the number')
num=int(input())
if(num % 5==0):
    print('hello')
else:
    print('Bye')
```

```
enter the number
50
hello
```

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

```
[11]: print('Enter the number')
num=int(input())
if(num%7==0):
    print("number is divisible 7")
else:
    print("number is not divisible 7")
```

```
Enter the number
6
number is not divisible 7
```

- 3 Write a program to check whether a person is eligible for voting or not

```
[13]: print("Enter the age of person")
age = int (input())
if(age>18):
    print("person is eligible for voting")
else:
```

```
print("person is not eligible for voting")
```

Enter the age of person

12

person is not eligible for voting

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

```
[22]: print("Enter the number")
number=int(input())
if(number==0 or 1):
    print("nor even nor prime number")
elif(number% 2 == 0):
    print("number is even")
```

Enter the number

4

nor even nor prime number

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

```
[1]: print("Enter the number of unit")
unit = int(input())
if (unit<=100):
    amount=0
    print("Electricity bill =",amount)
elif (100<unit<=200):
    amount=(unit-100)*5
    print("Electricity bill =",amount)
elif (200<unit):
    amount=(unit-200)*10+500
    print("Electricity bill =",amount)
```

Enter the number of unit

350

Electricity bill = 2000

6 Write a program to display the last digit of a number.

```
[5]: print("enter the two digit number")
num1=int(input())
print("Unit digit is",num1%10)
```

```
enter the two digit number
45
Unit digit is 5
```

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 B >= 60 and <= 80 C below 60 D

```
[12]: print("Enter the Percentage")
percent = float(input())
if (percent>90.00):
    print ("Grade A")
elif(80<percent<=90.00):
    print ("Grade B")
elif(60<percent<=80.00):
    print ("Grade C")
elif(percent<=60.00):
    print ("Grade D")
```

```
Enter the Percentage
60
Grade D
```

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%

```
[1]: print("Enter the cost price of bike")
cp=int(input())
if(100000<cp):
    rt=float(cp * 0.15)
    print("Road tax is", rt)
elif(100000>=cp>50000):
```

```

    rt=float(cp * 0.10)
    print("Road tax is", rt)
elif(50000>=cp):
    rt=float(cp * 0.05)
    print("Road tax is", rt)

```

Enter the cost price of bike
40000
Road tax is 2000.0

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

```

[14]: print("Enter the year")
year = int(input())
if(year%100==0):
    if(year%400==0):
        print("Year is leap year")
    else:
        print("Year is not leap year")
elif(year%4==0):
    print("Year is leap year")
else:
    print("Year is not leap year")

```

Enter the year
1700
Year 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

```

[18]: print("enter number ")
num=int(input())
if(0<num<8):
    if(num==1):
        print("Monday")
    elif(num==2):
        print("Tuesday")
    elif(num==3):
        print("Wednesday")
    elif(num==4):
        print("Thrusday")
    elif(num==5):
        print("Friday")

```

```

elif(num==6):
    print("Saturday")
elif(num==7):
    print("Sunday")
else:
    print("invalid input")

```

enter number

5

Friday

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

City	Monument
Delhi	Red Fort
Agra	Taj Mahal
Jaipur	Jal Mahal

```

[22]: print("Enter the city")
city=str(input())
if(city=="Delhi"):
    print("Red Fort")
elif(city=="Agra"):
    print("Taj Mahal")
elif(city=="Jaipur"):
    print("Jal Mahal")
else:
    print("Invalid Input")

```

Enter the city

Taj Mahal

Invalid Input

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

```
[25]: print("Enter the age of person")
age=int(input())
if(age>60):
    print("Person is senior citizen")
else:
    print("person is not senior citizen")
```

```
Enter the age of person
61
Person is senior citizen
```

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

```
[30]: print("enter the number")
num=int(input())
if(num%2==0 and num%3==0):
    print("entered number is divisible by 2 & 3")
else:
    print("entered number is not divisible by 2 & 3")
```

```
enter the number
15
entered number is not divisible by 2 & 3
```

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

```
[32]: print("enter the number")
num=int(input())
if (num>=0):
    print("entered number is positive")
else:
    print("entered number is negative")
```

```
enter the number
-1
entered number is negative
```

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

```
[7]: print("Enter the age of 4 persons")
```

```
a=int(input())  
b=int(input())  
c=int(input())  
d=int(input())  
age=[a,b,c,d]  
  
print(max(age))
```

Enter the age of 4 persons

20

50

10

6

50

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

```
[14]: a=str(input(print("Enter the character")))
list=['A','E','I','O','U','a','e','i','o','u']
if len(a)==1:
    if a in list:
        print("enter char is a vowel")
    else:
        print("enter char is a consonant")
else:
    print("Invalid input")
```

Enter the character

Noneb

enter char is a consonant

17 Accept the following from the user and calculate the percentage of class attended

```
[17]: a=int(input(print("total number of working days")))
b=int(input(print("total number of absent days")))
precent=((a-b)/a)*100
if (precent<75):
    print("Student is not allowed to sit in exam")
```

total number of working days

None100

```
total number of absent days
None40
Student is not allowed to sit in exam
```

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

```
[ ]: print("Enter the sides to the triangle")
a=int(input())
b=int(input())
c=int(input())
if (a==b==c):
    print("It is an Equilateral Triangle")
elif (a==b or b==c or a==c):
    print("It is an isosceles Triangle")
else:
    print("It is an Scalene Triangle")
```

```
Enter the sides to the triangle
```

19 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)

```
[6]: print("Enter the sides to the triangle")
a=int(input())
b=int(input())
c=int(input())
if( ((a+b)>c) or ((b+c)>a) or ((a+c)>b) ):
    print("the triangle is possible")
```

```
Enter the sides to the triangle
```

```
3
```

```
4
```

```
7
```

```
the triangle is possible
```