**WORK SHEET FOR PRACTICE**

**By Mr. Ajay Kumar**

**1.** Output:

age **=** int(input("Enter voters age:"))

**if** age >**=** 18:

    print("You can cast your vote!")

**else**:

    print("Sorry! You are not eligible to vote!")

###### 2. Write a python program that will check for the following conditions:

* If the light is **green**– Car is allowed to go
* If the light is **yellow**– Car has to wait
* If the light is **red**– Car has to stop
* Other signal – unrecognized signal. Example black, blue, etc…

**3.**Write a program to check students’ grades.  Your program should fulfill the following conditions:

1. Grade A – Outstanding
2. Grade B – Excellent
3. Grade C – Very Good
4. Grade D – Good
5. Grade E – Satisfactory
6. others – Unrecognized

**4.** Modify the earlier program students’ grades in such a way that they should take in five subject marks. Find the total mark and their percentage. Your program should check for the following conditions:

* If the percentage falls below 45, they are considered fail.
* If the percentage is between 45 and 60, grade them as pass.
* If the percentage is between 60 and 75, grade them as good.
* If the percentage is between 75 and 85, grade them as very good.
* If the percentage is between 85 and 100, grade them excellent.
* If the percentage is below zero or above 100, it’s an error.

**5.**

**x = "10"**

**y = 5**

**result = x + y**

**print(result)**

What will be the output of this code, and how can you fix any issues related to typecasting?

**6.**

**a = 10**

**b = 15**

**c = 20**

**if a < b < c:**

**print("Condition 1")**

**elif c > b > a:**

**print("Condition 2")**

**else:**

**print("Condition 3")**

What will be the output of this code, and what is the logic behind the conditions?

**7.**

**x="56"**

**y=3**

**z=x\*y**

**print(z)**

Find the output

**8. Give output as :59**

**x="56"**

**y=3**

**z=x+y**

**print(z)**

Find the error or change code to get the desired output.

**9. Give the output as : 5656**

**x="56"**

**y=int(x)**

**z=x+y**

**print(z)**

Find the error and correct this.

**10.** Write a Python program to find those numbers which are divisible by 7 and multiples of 5, between 1500 and 2700 (both included).

**11.** Write a Python program to convert temperatures to and from Celsius and Fahrenheit.  
[ Formula : c/5 = f-32/9 [ where c = temperature in celsius and f = temperature in fahrenheit ]  
Expected Output :  
60°C is 140 in Fahrenheit  
45°F is 7 in Celsius

**12.** **What is the difference between the == and = operators in Python?**

**13.**  Write a program to check if a given year is a leap year or not. Use the following rules:

* If the year is divisible by 4, it's a leap year.
* If the year is a century year (divisible by 100), it's not a leap year,