GE ASSIGNMENT.py - C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.py (3.11.0)

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```
                                                #DATA ENGINEERING(ELECTRONICS)ASSIGNMENT:

#1.To Accept the 'NAME' of the User and Print Welcome Message:

name=str(input("ENTER YOUR NAME: "))
print("Welcome",name)


#2. To Accept Real (DECIMAL) Numbers From the User and Print Their Addition:

a=float(input("ENTER THE FIRST NUMBER: "))
b=float(input("ENTER THE SECOND NUMBER: "))
print("The Addition of These Numbers is",a+b)

#3. To Accept the Value of Current Temperature From The User:

t=int(input("ENTER THE CURRENT TEMPERATURE: "))
if t>27:
    print("WEATHER IS HOT")
if t==27:
    print("WEATHER IS COMFORTABLE")
if t<27:
    print("WEATHER IS COLD")

#4. To Design a SIMPLE CALCULATOR:

a=float(input("Enter the First Number: "))
b=float(input("Enter the Second  Number: "))
c=str(input("Put the Opeartion you Want to Perform(+,-,*,/): "))
if c=="+":
    print("The Sum of these Numbers is:",a+b)
elif c=="-":
    print("The Difference of these Numbers is:",a-b)
elif c=="*":
    print("The Multiplication of these Numbers is:",a*b)
elif c=="/":
    print("The Division of these Numbers is:",a/b)

#5. To Find The Greatest of Three Integers:

a=int(input("ENTER THE FIRST NUMBER: "))
b=int(input("ENTER THE SECOND NUMBER: "))
c=int(input("ENTER THE THIRD NUMBER: "))

if a>b and a>c:
    print("THE FIRST NUMBER Is THE GREATEST NUMBER")
if b>a and b>c:
    print("THE SECOND NUMBER Is THE GREATEST NUMBER")
if c>b and c>a:
    print("THE THIRD NUMBER Is THE GREATEST NUMBER")
```

```python
#6. To Swap Two Numbers:

a=int(input("ENTER THE FIRST NUMBER: "))
b=int(input("ENTER THE SECOND NUMBER: "))

print("NUMBERS BEFORE SWAPPING",(a,b))
a,b==b,a
print("NUMBERS AFTER SWAPPING",(b,a))

#7. To Check Whether a Number is Even OR Odd:

a=int(input("ENTER YOUR NUMBER: "))
if a%2==0:
    print("THE NUMBER IS EVEN")
else:
    print("THE NUMBER IS ODD")

#8.To Determine The Roots of a Quadratic Equation:
a=int(input("Enter The Cofficient of X2: "))
b=int(input("Enter The Cofficient of X: "))
c=int(input("Enter The Cofficient of Constant: "))
d=b*2-4*a*c
if d>0:
    x1=-b+(d)**0.5/2*a
    x2=-b-(d)**0.5/2*a
    print("The Roots are",x1,",",x2)
else:
    print("\nPlease Enter real roots!!!!\n")
```

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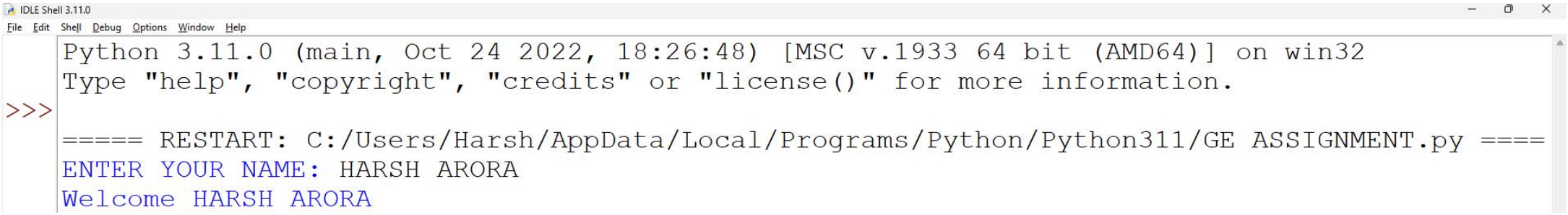
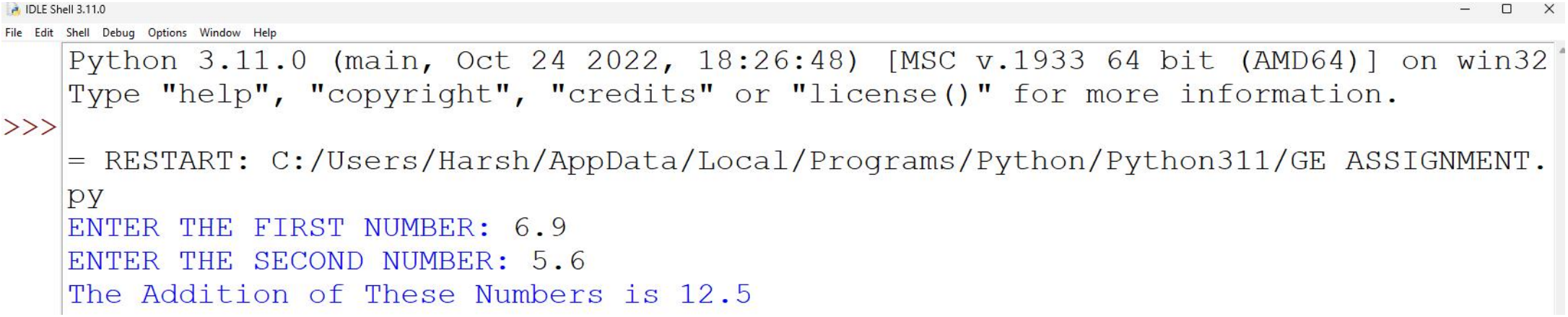
```
                #DATA ENGINEERING(ELECTRONICS)ASSIGNMENT:

#1.To Accept the 'NAME' of the User and Print Welcome Message:

name=str(input("ENTER YOUR NAME: "))
print("Welcome",name)
```


IDLE Shell 3.11.0
File Edit Shell Debug Options Window Help
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.py ====
ENTER YOUR NAME: HARSH ARORA
Welcome HARSH ARORA

```
#2. To Accept Real (DECIMAL) Numbers From the User and Print Their Addition:

a=float(input("ENTER THE FIRST NUMBER: "))
b=float(input("ENTER THE SECOND NUMBER: "))
print("The Addition of These Numbers is",a+b)
```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Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.
py
ENTER THE FIRST NUMBER: 6.9
ENTER THE SECOND NUMBER: 5.6
The Addition of These Numbers is 12.5

```
#3. To Accept the Value of Current Temperature From The User:

t=int(input("ENTER THE CURRENT TEMPERATURE: "))
if t>27:
    print("WEATHER IS HOT")
if t==27:
    print("WEATHER IS COMFORTABLE")
if t<27:
    print("WEATHER IS COLD")
```

```
>>>
= RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.
py
ENTER THE CURRENT TEMPERATURE: 45
WEATHER IS HOT
>>>
= RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.
py
ENTER THE CURRENT TEMPERATURE: 9
WEATHER IS COLD
>>>
= RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.
py
ENTER THE CURRENT TEMPERATURE: 27
WEATHER IS COMFORTABLE
```

```
#4. To Design a SIMPLE CALCULATOR:

a=float(input("Enter the First Number: "))
b=float(input("Enter the Second  Number: "))
c=str(input("Put the Opeartion you Want to Perform(+,-,*,/): "))
if c=="+":
    print("The Sum of these Numbers is:",a+b)
elif c=="-":
    print("The Difference of these Numbers is:",a-b)
elif c=="*":
    print("The Multiplication of these Numbers is:",a*b)
elif c=="/":
    print("The Division of these Numbers is:",a/b)
```

```
===== RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.py ====
Enter the First Number: 1.2
Enter the Second  Number: 6.5
Put the Opeartion you Want to Perform(+,-,*,/): *
The Multiplication of these Numbers is: 7.8
```

```
===== RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.py ====
Enter the First Number: 6.7
Enter the Second  Number: 3.4
Put the Opeartion you Want to Perform(+,-,*,/): +
The Sum of these Numbers is: 10.1
```

```
#5. To Find The Greatest of Three Integers:

a=int(input("ENTER THE FIRST NUMBER: "))
b=int(input("ENTER THE SECOND NUMBER: "))
c=int(input("ENTER THE THIRD NUMBER: "))

if a>b and a>c:
    print("THE FIRST NUMBER Is THE GREATEST NUMBER")
if b>a and b>c:
    print("THE SECOND NUMBER Is THE GREATEST NUMBER")
if c>b and c>a:
    print("THE THIRD NUMBER Is THE GREATEST NUMBER")
```

```
===== RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.py ====
ENTER THE FIRST NUMBER: 108
ENTER THE SECOND NUMBER: 290
ENTER THE THIRD NUMBER: 527
THE THIRD NUMBER Is THE GREATEST NUMBER
```

```
#6. To Swap Two Numbers:

a=int(input("ENTER THE FIRST NUMBER: "))
b=int(input("ENTER THE SECOND NUMBER: "))

print("NUMBERS BEFORE SWAPPING",(a,b))
a,b==b,a
print("NUMBERS AFTER SWAPPING",(b,a))
```

```
===== RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.py ====
ENTER THE FIRST NUMBER: 5
ENTER THE SECOND NUMBER: 9
NUMBERS BEFORE SWAPPING (5, 9)
NUMBERS AFTER SWAPPING (9, 5)
```

```python
#7. To Check Whether a Number is Even OR Odd:

a=int(input("ENTER YOUR NUMBER: "))
if a%2==0:
    print("THE NUMBER IS EVEN")
else:
    print("THE NUMBER IS ODD")
```

```
===== RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.py ====
ENTER YOUR NUMBER: 78
THE NUMBER IS EVEN

===== RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.py ====
ENTER YOUR NUMBER: 69
THE NUMBER IS ODD
```

```
#8.To Determine The Roots of a Quadratic Equation:
a=int(input("Enter The Cofficient of X2: "))
b=int(input("Enter The Cofficient of X: "))
c=int(input("Enter The Cofficient of Constant: "))
d=b*2-4*a*c
if d>0:
    x1=-b+(d)**0.5/2*a
    x2=-b-(d)**0.5/2*a
    print("The Roots are",x1,",",x2)
else:
    print("\nPlease Enter real roots!!!!\n")
```

```
===== RESTART: C:/Users/Harsh/AppData/Local/Programs/Python/Python311/GE ASSIGNMENT.py ====
Enter The Cofficient of X2: 1
Enter The Cofficient of X: -7
Enter The Cofficient of Constant: -30
The Roots are 12.1478150704935 , 1.8521849295064996
```

```
Enter The Cofficient of X2: 4
Enter The Cofficient of X: 4
Enter The Cofficient of Constant: 1

Please Enter real roots!!!!
```