```python
company = "regex"
print("company name is:",company)
```

```
company name is: regex
```

```python
company = "regex"
year = 2024
print("company name is:",company , ", year is :" , year)
```

```
company name is: regex , year is : 2024
```

```python
company = "regex"
year = 2024
print( f"company name is {company} year is {year}")
```

```
company name is regex year is 2024
```

```python
username ="tushar"
msg=f"hey user {username} "

print(msg)

username="aman"
print(msg)
```

```
hey user tushar
hey user tushar
```

```python
city = "jaipur"
city = "isha"
print(city)
```

```
isha
```

```python
city = "jaipur"
print("before:", id(city))

y="jaipur"
print("Y :", id(y))

city = "isha"
print("after:", id(city))
```

```
before: 2858891195824
Y : 2858891195824
after: 2858891588976
```

```python
print(y)
```

```
jaipur
```

```python
#operators
# -> Arithmetic
a=20/3
type(a)
print(a)
```

```
6.666666666666667
```

```python
20//3
```

Out[21]: 6

In [22]: `10.0+5`

Out[22]: 15.0

In [23]:
```python
#because divide aa chuka h isle
1+5*4/2-7+8
```

Out[23]: 12.0

In [24]: `4/2`

Out[24]: 2.0

In [25]:
```python
# remainder
20 % 3
```

Out[25]: 2

In [26]:
```python
# ** exponent
3 ** 4
```

Out[26]: 81

In [27]: `2 ** 3`

Out[27]: 8

In [ ]:
```python
# priorty
# **
# order jaruri nhi h order vise bhe ho skta
# * /  // %
# + -
```

In [28]: `1+5*3-2/1+2`

Out[28]: 16.0

In [29]:
```python
#assinment
x =10
x+5  #   +=
print(x)
```

10

In [31]:
```python
x =5
x %=3
print(x)
```

2

In [ ]: `# += , //=`

In [ ]: `# comparison`

```python
In [34]: # logical
         # and or not

         x=10
         y=19

         x== 10 and y > 18
```

Out[34]: True

```python
In [36]: # memership & identity

         "J" in "Jaipur"
```

Out[36]: True

```python
In [37]: "j" in "Jaipur"
```

Out[37]: False

```python
In [38]: "pur" in "Jaipur"
```

Out[38]: True

```python
In [39]: "purj" in "Jaipur"
```

Out[39]: False

```python
In [41]: "purj" not in "Jaipur"
```

Out[41]: True

```python
In [43]: # identity
         # variable => data type
         # object belong to a class

         x = 10
         type(x) is int
```

Out[43]: True

```python
In [45]: x = "abc"
         type(x) is not int
```

Out[45]: True

```python
In [55]: # == and is operator are not same
         x=500
         y=500
```

```python
In [53]: x==y
```

Out[53]: True

```
In [56]:   x is y
```

```
Out[56]:   False
```

```
In [61]:   x =250
           y =250
```

```
In [59]:   id (x)
```

```
Out[59]:   140718650274376
```

```
In [60]:   id (y)
```

```
Out[60]:   140718650274376
```

```
In [ ]:    # CONDITIONAL STATEMENT
```

```
In [67]:   # if statement
           '''
           if (condition):
               statement


           '''

           x =10

           if( True ):
               print("hello")
```

```
           hello
```

```
In [70]:   # rather than else we will use multiple condition by using elif
           x =12

           if( x==10 ):
               print("hello")
           else:
               print("condition is false")


           if (x == 12) :
               print("hey")
           else:
               print("condition is false")
```

```
           condition is false
           hey
```

```
In [72]:   # rather than else we will use multiple condition by using elif
           x =15

           if( x==10 ):
               print("hello")
           elif (x == 12) :
               print("hey")
           else:
               print("condition is false")
```

condition is false

In [74]:
```python
# take three variable an find out the minimum value
a, b, c = 5, 7, 10

if(a <= b and a <= c):
    print(a, "is the smallest")
elif(b <= a and b <= c):
    print(b, "is the smallest")
else:
    print(c, "is the smallest")
```

5 is the smallest

In [ ]:
```python
'''
take a input from the user and do the following
- if the number is greater than 60 print avg
- if the number is greater than 70 and less than 80 print good
- if the number is greater than 80 print excellent
- otherwise print "bad"
'''
```

In [83]:
```python
a=int(input("enter the no: "))
if (a > 90):
    print("excellent")
elif(a > 80):
    print("very good")
elif(a >= 70 & a < 80):
    print("good")
else:
    print("bad")
```

enter the no: 80
good

In [ ]:
```python
""" hw
- if a user have given me input 1
print current date
- if a user give me input 2
desktop pr ek folder bana na h user dega name
- if user give me input 3
to desktop pr ek file banye ga
- if user give me input  4
- to system shut down kr dena h

"""
```

In [ ]:
```python
"""# Questions
Q1. user input on number of unit in integer
- for the starting 10 unit price is 50 rs each
- for the next 20 unit price is 20 rs each
- for the rest of unit price will be 10 rs
calculate the total price
100 => 500 + 400 + 700
90
70


Q2.
take 3 number as input from a user as 3 side of a triangle
```

and check wheather it will create a triangle or not

Q3. take two no. from the user and check wheather both the number are divisible by 6
(divisibility rule say it should be divided by 2 and 3)
"""

In [1]:
```python
# Take user input for the number of units
num_units = int(input("Enter the number of units: "))

# Initialize total price
total_price = 0

# Calculate price for the first 10 units
if num_units >= 10:
    total_price += 10 * 50  # Each unit costs 50 rs
    num_units -= 10  # Decrement the remaining units

# Calculate price for the next 20 units
if num_units >= 20:
    total_price += 20 * 20  # Each unit costs 20 rs
    num_units -= 20  # Decrement the remaining units

# Calculate price for the rest of the units
total_price += num_units * 10  # Each unit costs 10 rs

# Print the total price
print("Total price:", total_price)
```

Enter the number of units: 10
Total price: 500

In [2]:
```python
# Take input for three sides of the triangle
side1 = float(input("Enter the length of side 1: "))
side2 = float(input("Enter the length of side 2: "))
side3 = float(input("Enter the length of side 3: "))

# Check if the given sides form a triangle
if side1 + side2 > side3 and side1 + side3 > side2 and side2 + side3 > side1:
    print("Yes, the given sides can form a triangle.")
else:
    print("No, the given sides cannot form a triangle.")
```

Enter the length of side 1: 12
Enter the length of side 2: 23
Enter the length of side 3: 34
Yes, the given sides can form a triangle.

In [3]:
```python
# Take input for two numbers
num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))

# Check if both numbers are divisible by 6
if num1 % 2 == 0 and num1 % 3 == 0 and num2 % 2 == 0 and num2 % 3 == 0:
    print("Both numbers are divisible by 6.")
else:
    print("Both numbers are not divisible by 6.")
```

```
Enter the first number: 10
Enter the second number: 23
Both numbers are not divisible by 6.
```

In [ ]:

In [ ]: