Ex. No. : 3.1 Classifying Triangles

Program:

```
a=int(input())            b=int(input())

c=int(input()) if(a==b and b==c and

c==a):

print("That's","a","equilateral

triangle") elif(a!=b and a!=c and

b!=c):

   print("That's","a","scalene

triangle") else:

   print("That's","a","isosceles
triangle")
```

Ex. No. : 3.2 Vowel or Consonant

Program:

```
x=input()

if(x=='y'):

   print("Sometimes it's a vowel... Sometimes it's a consonant.")

elif(x=='a' or x=='e' or x=='i' or x=='o' or x=='u'):

   print("It's a vowel.")

else:

   print("It's a consonant.")
```

Ex. No. : 3.3 <u>Electricity Bill</u>

Program

```python
a=float(input())
if(a<200):
b=a*1.20
if(b<=100):
b=100
print(format(b,".2f"))
else:
    print(format(b,".2f"))
elif(a>=200 and a<400):
   c=a*1.50
if(c>=400):
    print(format(c*0.15+c,".2f"))
else:
    print(format(c,".2f"))
elif(a>=400 and a<600):
d=a*1.80
print(format(d*0.15+d,".2f"))
elif(a>600):
   e=a*2.00
print(format(e*0.15+e,".2f"))
```

Ex. No. : 3.4   IN/OUT

Program:

```
a=int(input
())
b=int(input
()) c=a//2
if(b>=c):
print("IN")
else:
print("OU
T")
```

Ex. No. : 3.5 Second last digit
Program:

```
a=int(inu
t())
b=abs(a)
if(b>=10
):
c=b//10
d=c%10
print(d)
else:
   print(-1)
```

Ex. No. : 3.6 Chinese Zodiac

Program:

```python
a=int(input())

b=a%12

if(b==0):

    print(a,"is the year of the

Monkey.") elif(b==1):

    print(a,"is the year of the

Rooster.") elif(b==2):

    print(a,"is the year of the Dog.")

elif(b==3):

    print(a,"is the year of the Pig.")

elif(b==4):

    print(a,"is the year of the Rat.")

elif(b==5):

    print(a,"is the year of the Ox.")

elif(b==6):

    print(a,"is the year of the Tiger.")

elif(b==7):

    print(a,"is the year of the Hare.")

elif(b==8):

    print(a,"is the year of the
Dragon.") elif(b==9):
```

```python
   print(a,"is the yaer of the Snake.")

elif(b==10):

   print(a,"is the year of the Horse.")

elif(b==11):

   print(a,"is the year of the Sheep.")
```

Ex. No. : 3.7 Pythagorean triple
Program:

```python
a=int(input()) b=int(input()) c=int(input())
if(a*a+b*b==c*c or b*b+c*c==a*a or

c*c+a*a==b*b):


print("yes"
) else:
print("no")
```

Ex. No. : 3.8 Leap Year
Program:

```python
a=int(input())

b=a%100

c=a%400

if(b==0):

if(c==0):

    print(a,"is a leap year.")
   else:

    print(a,"is not a leap year.")

elif(a%4==0):

   print(a,"is a leap year.")
```

Ex. No. : 3.9 Month name to days

Program:

```
odd=['January','March','May','July','August','October','Decem
ber'] even=['April','June','September','November'] a=input()
if(a=='February'):
    print("February has 28 or 29 days in
it.") if a in odd:
    print(a,"has 31 days in
it.") if a in even:
    print(a,"has 30 days in it.")
```

Ex. No. : 3.10 Admission Eligibility

Program:

```
a=int(input()) b=int(input())
c=int(input()) if(a>=65 and
b>=55 and c>=50):
print("The candidate is
eligible") elif(a+b+c>=180):
    print("The candidate is eligible")
else:    print("The candidate is not
eligible")
```