Odd or Even.

Program:

```
N=int(input("Enter a number:"))
if(N%2==0):
 print("The number is EVEN")
else:
 print("The number is ODD")
```

Output:

```
Enter a number:56
The number is EVEN
```

Biggest of three numbers.

Program:

```
A=int(input("A=Enter a number:"))
 B=int(input("B=Enter a number:"))
 C=int(input("C=Enter a number:"))
 if((A>B)&(A>C)):
  print("A is bigger")
 elif ((B>A)&(B>C)):
   print("B is bigger")
 else:
   print("C is bigger")
```

Output:

```
A=Enter a number:56
```

B=Enter a number:69

C=Enter a number:33

B is bigger

Student grade analysis:

Program:

```
m1=int(input("Enter the mark for subject 1:"))
m2=int(input("Enter the mark for subject 2:"))
m3=int(input("Enter the mark for subject 3:"))
m4=int(input("Enter the mark for subject 4:"))
m5=int(input("Enter the mark for subject 5:"))
T=m1+m2+m3+m4+m5
avg=T%5
print("Total=",T,"and Average=",avg)
if(avg>=90):
   G='o'
elif(avg>=80):
   G='A+'
elif(avg>=70):
   G='A'
elif(avg>=60):
   G='B'
elif(avg>=50):
   G='B'
```

```
else: G='U'
print("Your grade is",G)
```

Output:

```
Enter the mark for subject 1:89
Enter the mark for subject 2:63
Enter the mark for subject 3:87
Enter the mark for subject 4:74
Enter the mark for subject 5:68
('Total=', 381, 'and Average=', 1)
('Your grade is', 'U')
```

Quadratic equation:

Program:

```
import math
a=int(input("Enter a:"))
b=int(input("Enter b:"))
c=int(input("Enter c:"))
d=(b**2)-(4*a*c)
sq=math.sqrt(abs(d))
if a==0:
    print("Enter the coefficients")
elif a>0:
   print("Real and different roots")
   print((-b+sq)%(2*a))
   print((-b-sq)%(2*a))
```

```
else:
    print("complex roots")
    print((-b+sq)%(2*a))
    print((-b-sq)%(2*a))
```

Output:

```
Enter a:45
Enter b:55
Enter c:66
Real and different roots
39.1010095589
30.8989904411
```