

## Exceptions:

```
try :
    a = int(input('Enter an integer: '))
    b = int(input('Enter an integer: '))
    c = a / b
    print('c =', c)
except ZeroDivisionError :
    print('Denominator is 0')
```

```
try :
    # some statements
except (NameError, TypeError, ZeroDivisionError) :
    # some other statements
```

```
try :
    a = int(input('Enter an integer: '))
    b = int(input('Enter an integer: '))
    c = a / b
    print('c =', c)
except ZeroDivisionError as zde :
    print('Denominator is 0')
    print(zde.args)
    print(zde)
except ValueError :
    print('Unable to convert string to int')
except :
    print('Some unknown error')
```

```
try :
    lst = [10, 20, 30, 40, 50]
    for num in lst :
        i = int(num)
        j = i * i
        print(i, j)
except NameError:
    print(NameError.args)
else:
    print('Total numbers processed', len(lst))
    del(lst)
```

1. Write a program that infinitely receives positive integer as input and prints its square. If a negative number is entered then raise an exception, display a relevant error message and make a graceful exit.

```
try:
    while True :
        num = int(input('Enter a positive number: '))
        if num >= 0 :
            print(num * num)
        else :
            raise ValueError('Negative number')
except ValueError as ve :
    print(ve.args)
```

2. Write a program that receives an integer as input. If a string is entered instead of an integer, then report an error and give another chance to user to enter an integer. Continue this process till correct input is supplied.

```
while True :  
    try :  
        num = int(input('Enter a number: '))  
        break  
    except ValueError :  
        print('Incorrect Input')  
print('You entered: ', num)
```