

**TUPLES**

```
# create an empty tuple
inventory = ()

# treat the tuple as a condition
if not inventory:
    print("You have nothing.")

# create a tuple with some items
inventory = ("sword",
            "shovel",
            "axe",
            "golden apple")

# print the tuple
print("The inventory contains:")
print(inventory)

# print each element in the tuple
print("Your items:")
for item in inventory:
    print(item)
```

**LEN() FUNCTION**

```
message = input("Enter a message")
print("number of characters in your
message is", len(message))
```

**RANDOM LETTERS PROGRAM**

```
import random
word = "Hello"

high = len(word)
low = -len(word)

position = random.randrange
(low,high)

for i in range(12):
    position = random.randrange
    (low,high)

    print("word[" , position, " ]
    \t", word[position])
```

**USING LEN() with TUPLES**

```
# Minecraft inventory
# create a tuple with items and display
inventory = ("sword",
            "shovel",
            "axe",
            "golden apple")

print("Your items:")
for item in inventory:
    print(item)

input("Press enter to continue.")

# get the length of a tuple
print("You have", len(inventory), "items.")

input("Press enter to continue.")

# test for membership with "in"
if "golden apple" in inventory:
    print("You live to fight again today.")

# display one item through an index no.
index = int(input("Enter the index number
for an item in inventory: "))
print("At index", index, "is", inventory
[index])

# display a "slice" of your inventory
start = int(input("\nEnter the index number
to begin a slice: "))
finish = int(input("Enter the index number
to end the slice: "))
print("inventory[" , start, ":", finish, " ]
is", end=" ")
print(inventory[start:finish])

input("\nPress enter to continue.")

# concatenate the two tuples
chest = ("gold ingots", "bonemeal")
print("You find a chest. It contains:")
print(chest)

print("You add the contents of the chest to
your inventory.")
inventory += chest

print("Your inventory is now:")
print(inventory)
```