

## User Defined Functions –

### The Gold Game

You are creating a game to see how greedy the user is. They will be told that there is a room full of gold and that they can take out a percentage of the gold. If they take out more than 50% they are greedy and go to the dungeon. If they take out 50% or less they are not greedy and win the game.

You will use two (2) user defined functions (modules):

- The welcome or starting function (module) includes
  - The title of the program
  - Asking for the user's name
    - Within this function (module) I set the name variable to global then used the variable to get the user's name
    - You may use this method or whatever method you like to make the name variable passable
- The body function (module) which asks for the percentage of the gold the user would take out of the room
  - Percentage is implied – you do not have to determine the formatting code for percentage (see example)
  - Use ValueError to check if they entered a number

The program in the example uses “If-then-Else” inside of the second user defined function (module)

Exiting the program

- To exit the program I used the `sys.exit(0)` function
  - I placed this command after the “true” portion of the “If-then-Else” statement
  - The message that the user was not greedy and won the game runs
  - The exit command runs next and the program is exited
  - See example
- Just like when you used the “random” function, you had to import the function, you will need to import the “sys” function.
- Type the following in at the beginning of your coding:
  - `import sys`
  - The command to exit within the function (module) is:
    - `sys.exit(0)`

### Hints:

- Check for greediness (using amount as the variable in this example)
  - `amount <= 50`
  - Do not worry about a percent format
- Import the `sys` function (see above for command)
- Use `ValueError` to check for numeric errors

### Turn projects into Moodle:

- Flowchart
- Screenshot of working python file
- Python file

```
Python 3.5.3 Shell
File Edit Shell Debug Options Window Help
Python 3.5.3 (v3.5.3:1880cb95a742, Jan 16 2017, 15:51:26) [MSC v.1900 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: E:/In-Class Final Practice File/User Defined functions/Gold in that thar room v1.py

<<<<< Welcome to the Gold Room! >>>>>

Please enter your name and enter the Gold Room: Tim

Tim, This room is full of gold. You can take a percentage of the gold!
How much would you take? > iw

Dude..... learn to type a number.

Tim, This room is full of gold. You can take a percentage of the gold!
How much would you take? > 90

Tim, You greedy crook! Off to the DUNGEON with you!

Tim, This room is full of gold. You can take a percentage of the gold!
How much would you take? > 50

Tim, Nice, you're not greedy, you win!

>>> |
```

Ln: 25 Col: 4

