

Create Project Questions 2a - 2d, from page 11 of
<https://apcentral.collegeboard.org/pdf/ap-csp-student-task-directions.pdf>

I know it says what the word count can't exceed but questions should be thoroughly described.

2a. Provide a written response or audio narration in your video that:

- Identifies the programming language;
- Identifies the purpose of your program; and
- Explains what the video illustrates.

For my programming language I'm using python which identifies my code, and my code is for playing Slot machines where it uses almost the same type of coding about 4 times until then end which then it will ask the user if they would like to start over

What i show in my video is how my code works and if you look at the code in the beginning it shows me highlighting the line where it says Global egg which tells that if you type egg() in the right side you win 1 million dollars it a little thing to show if you see the code from there it is meant to be an easter egg in the code

2b. Describe the incremental and iterative development process of your program, focusing on two distinct points in that process. Describe the difficulties and / or opportunities you encountered and how they were resolved or incorporated. In your description clearly indicate whether the development described was collaboratively or independent. At least one of these points must refer to independent program development. (Must not exceed 200 words)

As I was making my code I had a lot of trouble with the code adding then dividing the number it was randomly choosing and then bringing those numbers to add to another so it would be the first code choosing random number then dividing them and then adding it to next one 4 times but the difficult point was the code before it adding to the second so resolve this i used the global to then each code number would equal to a letter so then all i had to do was add this letter with this one and so on and it worked perfectly after a lot of trial and error and I added more one more thing that was hidden such as an easter egg which you would then get 1 million money.

2c. Capture and paste a program code segment that implements an algorithm (marked with an **oval** and in **section 3** below) and that is fundamental for your program to achieve its intended purpose. This code segment must be an algorithm you developed individually on your own, must include two or more algorithms, and must integrate mathematical and/or logical concepts. Describe how each algorithm within your selected algorithm functions independently, as well as in combination with others, to form a new algorithm that helps to achieve the intended purpose of the program. (Must not exceed 200 words)

<student response here>

```
print "\t\t\tHello there and Welcome to my version of Slot machines \t\t\t\t\t where  
it a little bit different than usual for Instructions please type gamble()"  
import random  
#Global is used to make a variable active and there definition  
global d  
global h  
global i  
global m  
global egg  
def gamble():  
    print "Welcome To Slot Machines To begin Please Type Start() but just to let you know your  
    cash will show after you each Roll and you can either start over or continue"  
def Start():  
    money = input("Your balance is 25$ Please Type Roll()")  
def Roll():  
    global d  
    #Randomly chooses bewteen either numbers  
    a = random.randint(25,50)  
    b = random.randint(75,100)  
    c = random.randint(2,3)  
    #Adds A Multiply B but divides C  
    d = []  
    d += [a]  
    d += [b]  
    d += [c]  
    d = a * b / c  
    #Prints d on the right side saying something before and after  
    print "Your Cash is"  
    print d  
    print "To go again time Roll2()"  
    print "To Start over type Start()"  
def Roll2():  
    global h  
    #Randomly chooses bewteen either numbers  
    q = random.randint(30,55)  
    f = random.randint(80,105)  
    g = random.randint(3,4)  
    #Multiply Q and F then divides by g  
    h = []  
    h += [q]  
    h += [f]  
    h += [g]  
    h = q * f / g
```

Here is where the code would random choose numbers in A and B then divide by C which the it would equal to D and then it would print what D and ask to either Start over or Role again and it would happen like this 3 more time except adding each one and giving you what you got after each Roll

2d. Capture and paste a program code segment that contains an abstraction you developed individually on your own (marked with an **rectangle** and in **section 3** below). This abstraction must integrate mathematical and logical concepts. Explain how your abstraction helped manage the complexity of your program. (Must not exceed 200 words)

In this part is where as soon as you hit run it will give you a way to see the instruction after you type `gamble()` to where it give one simple thing and a really small explanation of what the code will tell you and ask you

```
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import random  
#Global is used to make a variable active and there definition  
global d  
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def gamble():  
    print "Welcome To Slot Machines To begin Please Type Start() but just to let you know your  
    cash will show after you each Roll and you can either start over or continue"  
def Start():  
  
    money = input ("Your balance is 25$ Please Type Roll()")  
def Roll():  
    global d  
    #Randomly chooses bewteen either numbers  
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    #Adds A Multiply B but divides C  
    d = []  
    d += [a]  
    d += [b]  
    d += [c]  
    d = a * b / c  
    #Prints d on the right side saying something before and after  
    print "Your Cash is"  
    print d  
    print "To go again time Roll2()  
    print "To Start over type Start()"
```

```
def Roll2():  
    global h  
    #Randomly chooses bewteen either numbers  
    q = random.randint (30,55)  
    f = random.randint (80,105)  
    g = random.randint (3,4)  
    #Multiply Q and F then divides by g  
    h = []  
    h += [q]  
    h += [f]  
    h += [g]  
    h = q * f / g
```