3 - Development

NEA

Programming & Development

Now use your pseudocode to create your code in python.

Techniques use could include:

- Variables, operators, inputs, outputs and assignments
- Sequence, selection and iteration
- Fixed-count and condition-controlled loops
- Data types (only integer, real, Boolean and string are mentioned)
- Basic string manipulation (e.g. substring, length, index of, concatenate)
- Basic file handling operations (open, read, write, close)
- Definition and use of arrays

Code - Annotation

The minimum you should aim for is the following:

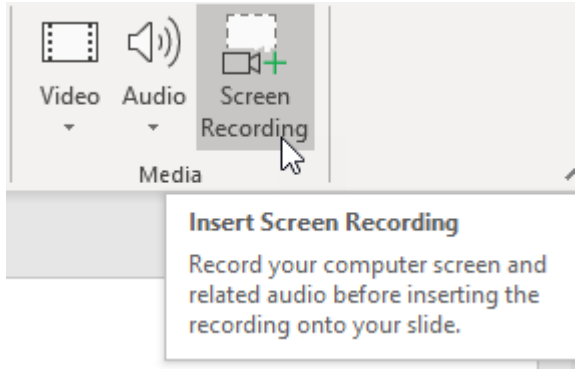
- Describe the purpose of each variable as it is declared
- Describe what each subroutine does at the start of the subroutine
- Use comments to show that you understand any particularly complex pieces of code, such as nested loops or lines with multiple sets of brackets

```
# guess the number

# import modules
import random

# define variables
target = random.randint(1,100)
print(target)

# define functions
#  function to compare values
def isSame(target, number):
    if target == number:
        result = "Win"
    elif target > number:
        result = "Low"
    else:
        result = "High"
    return result

print ("Hello - I have thought of a number between 1 and 100")
guess = int(input("What do you think it is? "))

highLow = isSame(target,guess)

# loops until number is found
while highLow != "Win":
    if highLow == "Low":
        guess = int(input("That is too low. Try Again - "))
    else:
        guess = int(input("That is too high. Try Again - "))
    highLow = isSame(target,guess)

input("Well done that is correct")
```

Development and Testing

Your program will not emerge, fully functioning, on your first attempt.

- What mistakes did you make, and how did you overcome them?



Test your code according to your test planProvide commentary on the test:

- What did you do?
- What did the program do in response?
- What was supposed to happen?
- Why did any undesirable results happen?

The quickest way to create evidence of testing is to record what you do on screen and narrate over the top of it.

Development Checklist

Development

☐ There is little or no evidence of how the solution was built	☐ There is some evidence of key development points as the solution was built	☐ There is comprehensive evidence of the solution as it was built
☐ There is little or no evidence of systematic testing during development	☐ There is some evidence of systematic testing during development	☐ There is full evidence of systematic testing during development
☐ There is little or no evidence that systematic testing is used to refine the solution	☐ There is some evidence that systematic testing is used to refine the solution	☐ There is significant evidence that systematic testing is used to refine the solution