**Remember Version 2 Python Reflection**

**Q1 For EACH of the following Python statements, write the type of object the underlined and bolded expression evaluates to:**

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| --- | --- |
| **Statement** | **Type of Object** |
| **pygame.init()** | tuple |
| surface = **pygame.display.set\_mode((500, 400), 0, 0)** | Surface |
| **pygame.display.set\_caption('Remember The Word')** | None |
| bgColor = **pygame.Color('black')** | Color |
| icon\_width = **uaio.get\_width('UA', 100)** | int |
| surface\_width = **surface.get\_width()** | int |
| **uaio.draw\_string('sandwich', surface)** | None |
| playerWord = **uaio.input\_string('What word begins with the letter c?', surface)** | str |
| **surface.fill(bg\_color)** | Rect |
| **playerWord == 'chair'** | bool |
| **pygame.quit()** | None |

**Q2 Use this program segment from Remember 2 to answer the questions:**

if playerWord == 'chair':

uaio.draw\_string('Congratulations, you are correct.', surface)

else:

uaio.draw\_string('Sorry, you entered '+ playerWord, surface)

uaio.draw\_string('The answer was chair', surface, (0, string\_height))

**List the kind of each statement in the program segment.**

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| **If statement, Comparison, function call** |

**List each keyword in the program segment.**

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| **If, else** |

**List the types of each object that is used in the program segment.**

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| --- |
| **Str, keyword, operator, function, int, Surface** |

**List each operator, that is used in the program segment, together with its operand types**

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| **== comparison, + addition** |

**Q3 This program segment from Remember 2 displays the string 'UA' at the top right corner of the window surface using a 100 pixel font in green on a black background.**

# display icon

icon\_width = uaio.get\_width('UA', 100)

surface\_width = surface.get\_width()

x\_coord\_icon = surface\_width - icon\_width

uaio.draw\_string('UA', surface, (x\_coord\_icon, 0), 100, pygame.Color('green'))

**Modify the code to display the string 'UA' at the top left corner of the window surface using a 24 pixel font in white on a black background.**

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| # display icon  uaio.draw\_string('UA', surface, (0, 0)) |

**(\*) Modify the code to display the string 'UA' at the bottom right corner of the window surface using a 50 pixel font in red on a blue background.**

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| --- |
| # display icon  icon\_width = uaio.get\_width('UA', 50)  icon\_height = uaio.get\_height('UA', 50)  surface\_width = surface.get\_width()  surface\_height = surface.get\_height()  x\_coord\_icon = surface\_width - icon\_width  Y\_coord\_icon = surface\_height - icon\_height  surface.fill(pygame.Color(‘blue’)  uaio.draw\_string('UA', surface, (x\_coord\_icon, y\_coord\_icon), 50, pygame.Color('red')) |

**(\*) Q4 This program statement from Remember 2, displays the prompt at the bottom left corner of the window surface using a 24 pixel font in white on a black background.**

# end game

string\_height = uaio.get\_height(‘test’)

surface\_height = surface.get\_height()

y\_coord = surface\_height - string\_height

uaio.input\_string('Press enter to end the game', surface, (0, y\_coord))

**Modify the code to display the prompt ‘Press enter to end the game’ at the bottom right corner of the window surface using a 40 pixel font in green on a blue background.**

|  |
| --- |
| str\_height = uaio.get\_height(‘test’, 40)  str\_width = uaio.get\_width( **‘Press enter to end the game’**, 40)  surface\_height = surface.get\_height()  surface\_width = surface.get\_width()  y\_coord = surface\_height - str\_height  X\_coord = surface\_width - str\_width  surface.fill(pygame.Color(‘blue’)  uaio.input\_string('Press enter to end the game', surface, (x\_coord, y\_coord), 40, pygame.Color(‘green’) |