Getting Started With Python Programming: Part 2

•Getting information from the user (input)

- •How information is stored, converting
- between different types
- Formatting text output



Variables: Storing Information (If There Is Time)						
 On the computer all information is stored in binary (2 states) Example: RAM/memory stores information in a series of on-off combinations A single off/off combination is referred to as a 'bit' 						
Bit	on	OR	off			
Byte •8 bits	9 9 9 9					
					James Tam	







Storing Character Information (If There Is Time)

- Typically characters are encoded using ASCII
- Each character is mapped to a numeric value

 E.g., 'A' = 65, 'B' = 66, 'a' = 97, '2' = 50
- These numeric values are stored in the computer using binary

Character	ASCII numeric code	Binary code
'A'	65	01000001
ʻB'	66	01000010
ʻa'	97	01100001
'2'	50	00110010

James Tam











James Tan



• Determine the output of the following program:

```
print(12+33)
print("12"+"33")
x = 12
y = 21
print(x+y)
print(str(x)+str(y))
```













Specifier	Type of Information to display
%s	String
%d	Integer
%f	Floating point











 How to use format specifiers (field width, precision) to format output

James Tam

The back-slash cha lisplayed but inste vill follow the slas	aracter enclosed within quotes won't be ead indicates that a formatting (escape) h:	code
Escape sequence	Description	
\a	Alarm: Causes the program to beep.	
\n	Newline: Moves the cursor to beginning of the next line.	
\t	Tab: Moves the cursor forward one tab stop.	
۷	Single quote: Prints a single quote.	
/"	Double quote: Prints a double quote.	
<i>\\</i>	Backslash: Prints one backslash.	

Γ

Escape Codes (2)					
• Program name: 15formatting.py					
print (" \a *Beep!*")	*Beep!* (may not work through text-on				
print ("hi \n there")	hi there				
print ('it \' s')	it's				
print ("he\\y \"you\"") he\y "you"					
	James Tam				



Section Summary: Escape Codes

• How to use escape codes to format output

James Tam