

# Quizzes ICS 104

Term: 211

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| Quiz number | Material                            |  | Notes  |
|-------------|-------------------------------------|--|--|
| Quiz 1      | Chapter 1<br>Chapter 2              | Variables, Strings and<br>Arithmetic Operations                    | Solved by a student.<br>The grade is full<br>mark  |
| Quiz 2      | Chapter 3<br>Chapter 4              | Decision<br>Loops  | Solved by a teacher.   |
| Quiz 3      | Chapter 5<br>Chapter 6<br>Chapter 7 | Functions<br>List, Tuples and Dictionaries<br>Files and Exceptions | Solved by a student.<br>Coding part: I tried<br>to give you a correct<br>answer but you<br>should check it |
| Quiz 4      | Chapter 9<br>Chapter 10             | C language   | Solved by a teacher.   |

- We didn't get a quiz about Chapter 8: Classes and Object Orientation

Good Luck my friends

# ICS104 – Introduction to Programming in Python and C

## Term 211 - Quiz 1 – Section 1

Name: [REDACTED]

ID: [REDACTED]

Serial # [REDACTED]

Part 1: Choose the correct answer:

**Q1. you need to import math module to use which of the following functions:**

- a. print()      b. int()      ☒ c. sqrt()      d. All above.

**Q2. Which of the following is a part of the Central Processing Unit (CPU)**

- a. Arithmetic Logic Unit      b. Control Unit      ☒ c. RAM      ☒ d. a and b

Part 2: What is the output of the following code?

*Notes: If there is no output then write NO OUTPUT in the answer box*

*If the code will result in an error write ERROR in the answer box*

Q3. (2 points)

| Code  | Output  |
|---|---|
| <pre> a = 3 b = float("1.5") c = a ** 2 + b/a * 2 d = (a ** 2 + b/a) * 2 print(c) print(d) </pre> | <p><input checked="" type="checkbox"/> 10</p> <p>19</p> |

$9 + 1.5 = 10.5$   
 $10.5 * 2 = 21$   
 $21 - 2 = 19$   
 (Note: The handwritten calculation shows a correction from 21 to 19, likely due to a misinterpretation of the code's order of operations or a typo in the original image.)

Q4. (1 points)

| Code   | Output           |
|--|------------------|
| <pre>a = 42 b = a % 2 c = a / b print(c)</pre> | <div>ERROR</div> |

Q5. (2 points)

| Code   | Output                  |
|--|-------------------------|
| <pre>a = "Hello World" b = a[2] c = a[4] * 4 d = b + c + b print(b) print(d)</pre> | <div>l<br/> oooo </div> |

Q5. (3 points)

| Code   | Output         |
|--|----------------|
| <pre>a = round(10.5) b = abs(-5) * a a = b / a print(a,b) # print(c)</pre> | <div>550</div> |

10

$$b = 5 \times 10 = 50$$

$$\frac{50}{10} = 5$$

**ICS104 – Introduction to Programming in Python and C**  
**Term 211 - Quiz 2 – Section 1**

Name:

ID:

Serial #

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**Q1. What is the output of the following code segment? (1 point)**

```
a = 13
b = 20
c = 35

if a < b and a < c :
    print(a)
elif b < a or b < c :
    print(b)
elif c < a and c < b :
    print(c)
```

|       |       |       |              |
|-------|-------|-------|--------------|
| a) 13 | b) 20 | c) 35 | d) No output |
|-------|-------|-------|--------------|

**Q2. Which of the following code snippets print all odd numbers from 1 to 10 (including 1)? (2 point)**

|    |  |
|----|--|
| a) | <pre>for i in range(0,10,2):     print(i)</pre>                                  |
| b) | <pre>i = 1 while i &lt;= 10:     if i%2 != 0:         print(i)     i = i+1</pre> |
| c) | <pre>i = 1 while i &lt;= 10:     if i%2 != 0:         print(i)     i = i+1</pre> |
| d) | <pre>i = 1 while i &lt;= 10:     i = i+1     if i%2 != 0:         print(i)</pre> |

**Q3. What is the output of the following code segment? (2 points)**

| Code  | Output             |
|---|--------------------|
| <pre>for i in range(1,4):     if i%2 == 0:         j = 1         while j &lt;= i:             print(i, j)             j = j + 1</pre> | <pre>2 1 2 2</pre> |

**Q4. The following code stores all letters in a string variable called `letters` and all digits in a string variable called `nums`, the code then prints both variables.**

**Complete the code to achieve this task. Make sure your indentation is correct. (5 points)**

**Note: The expected output when you print the variables `letters` and `nums` is as follows:**

quiz  
329932

```
sent = "3-q2u99i3z2"
letters = ""
nums = ""
for char in sent:
    # write your code here
    if char.isalpha():
        letters = letters + char
    elif char.isdigit():
        nums = nums + char

print(letters)
print(nums)
```

8-5

**ICS104 – Introduction to Programming in Python and C**  
**Term 211 - Quiz 3 – Section 1**

Name: [REDACTED]

ID: [REDACTED]

Serial # [REDACTED]

**Q1. What is the output of the following code segment? (2 point)**

**1.1**

```
list1 = ['a', 'b', 'c', 'd']
list2 = list1
list1.append('e')
list2.remove('a')
print(list2)
```

- |                              |
|------------------------------|
| a) ['b', 'c', 'd', 'e']      |
| b) ['b', 'c', 'd']           |
| c) ['a', 'b', 'c', 'd', 'e'] |
| d) ['a', 'b', 'c', 'd']      |

**1.2**

```
credits = {"ICS104": 4, "MATH101": 4}
credits["PHYS101"] = 4
credits["ICS104"] = 3
print(credits["ICS104"])
```

- |      |      |      |             |
|------|------|------|-------------|
| a) 4 | b) 3 | c) 2 | d) KeyError |
|------|------|------|-------------|

**Q2. What is the output of the following code segment? (2 points)**

| Code  | Output        |
|---|---------------|
| <pre>values = [3, 2, 4, 7, 11, 2] found = False pos = len(values) - 1 while pos &gt;= 0 and not found :     if values[pos] % 2 == 1:         found = True         print(values[pos])     else :         pos = pos - 1</pre> | <pre>  </pre> |

Q4. Write a function named readInt that takes no arguments and does the following: reads an input from the user, converts it to an integer and returns that integer. After that, create a main function that reads five integers from the user using readInt, and stores them in a list, then prints that list. Write a call to your main function. Assume the user always enter valid integers. (6 points)

```
def read():  
    x = int(input('enter num: '))  
    return x  
  
def main():  
    numList = []  
    for i in range(5):  
        numList.append(read())  
    print(numList)  
main()
```

```
enter num: 1  
enter num: 3  
enter num: 2  
enter num: 4  
enter num: 5  
[1, 3, 2, 4, 5]
```



**ICS104 – Introduction to Programming in Python and C**  
**Term 211 - Quiz 4 – Section 1**

Name:

ID:

Serial #

**Q1. What is the output of the following code segment? (2 point)**

1.1)

```
#include<stdio.h>
int main() {
    int i;
    for(i=1; i< 5; i=i+2)
        printf("%d", i);
    return 0;
}
```

|           |       |      |                      |
|-----------|-------|------|----------------------|
| a) 1<br>3 | b) 13 | c) 1 | d) None of the above |
|-----------|-------|------|----------------------|

1.2)

```
#include<stdio.h>
int main() {
    int i = 3;
    int j = 4;
    i = ++j;
    printf("%d %d", i,j);
    return 0;
}
```

|        |        |        |        |
|--------|--------|--------|--------|
| a) 4 5 | b) 4 4 | c) 5 5 | d) 5 4 |
|--------|--------|--------|--------|

**Q2. What is the output of the following code segments? (8 points)**

| Code  | Output                    |
|---|---------------------------|
| <pre>#include &lt;stdio.h&gt; int main(){     int a = 1;     int *b = &amp;a;     a = 2;     *b = 3;     printf("%d\n", *b);     printf("%d\n", a);     return 0; }</pre> | <div>3</div> <div>3</div> |



| Code   | Output             |
|--|--------------------|
| <pre> #include &lt;stdio.h&gt; void fn(double *a, int b){     *a = *a - 1;     b = b + 1; }  int main() {     double x = 4.2;     double *xp = &amp;x;     int b = 3;     fn(xp, b);     printf("%.11f\n", *xp);     printf("%d\n", b);     return 0; } </pre> | <pre> 3.2 3 </pre> |

| Code   | Output         |
|--|----------------|
| <pre> #include&lt;stdio.h&gt; int main() {     int i = 4;     do{         i=i-1;         printf("%d",i);     }while(i&gt;=4);     return 0; } </pre> | <pre> 3 </pre> |