

First Name (Print): _____ Last Name (Print): _____

Student Number: _____



**Irving K. Barber Faculty of Science
COSC 122 Midterm II Exam**

Instructor: Dr. Bowen Hui
Friday, November 21, 2025
Time: 2:05 pm - 3:15 pm

Instructions:

This is a closed-book exam. No calculators are allowed. Turn off your cell phone and put it away. Have your student ID card out on your desk.

This exam has 6 pages (excluding this cover page).

| Question | Score | Possible Marks |
|------------|-------|----------------|
| Question 1 | | 6 |
| Question 2 | | 5 |
| Question 3 | | 9 |
| Question 4 | | 8 |
| Question 5 | | 7 |
| Question 6 | | 5 |
| Question 7 | | 4 |
| Total | | 41 |

Part 1: Short Answers**Question 1. (6 points)**

Write the HTML code that produces the following table:

| Morning | Afternoon | Evening |
|---|--|--|
| <ul style="list-style-type: none">• Math 101• Room 205• Instructor: <i>Dr. Lee</i> | <ol style="list-style-type: none">1. <u>Computer Science</u> Lab2. English Literature | <ul style="list-style-type: none">• <i>Project Work:</i><ol style="list-style-type: none">A. Prepare slidesB. Write summaryC. Group discussion |

Note that your code needs to use `<th></th>` in the solution.

Grading scheme:

- [1 pt] General table format
- [1 pt] Correct content in each cell
- [3 pts] Correct list usage, one per list
- [1 pt] Correct formatting

Question 2. (5 points)

In defining the CSS style inside the `<head></head>` section of your HTML form, you want to create a new style for two items:

- All paragraph text should be double-spaced and right-justified, and
- All links should be italicized and highlighted with a light gray color when hovered.

Complete the following CSS code by filling in the blanks below.

```
p {
```

```
    text-align: _____;
```

```
    line-height: _____;
```

```
}
```

```
a:_____ {
```

```
    font-style: _____;
```

```
    background-color: _____;
```

```
}
```

Grading scheme:

- [1 pt] per blank

Question 3. (9 points)

You are designing a website for a game. You want to showcase the players by creating a profile card for each player that outlines their level and skills. This card should visually stand out with a green border that is three pixels thick, 15 pixels of padding so the text does not stick to the edges, and 25 pixels of margin around the text to separate it from other content. The heading inside the profile will center the player's name in dark green text. Complete the code below by defining a div class called "profile-card" that contains the text for the player details, and write CSS to style this box accordingly. You may wish to use the color name "darkgreen" in your solution.

```
<html>
<head>
.profile-card {

    _____: 3px solid green;

    padding: _____;

    _____: 25px;
}

_____ h2 {

    text-align: _____;

    color: _____;
}
</head>
<body>

<div _____ = _____>

    <_____>Sung, Jinwoo</h2>
    <ul>
    <li><b>Level <i>43</i></b>
    <li><b>Skills:</b>
        <ul>
        <li> Speed
        <li> Stealth
        <li> Shadow Extraction
        </ul>
    </ul>
</div>
</body>
</html>
```

Grading scheme:

- [1 pt] per blank

Question 4. (8 points)

You are writing a program that computes the average of three scores using the formula: $avg = (s1 + s2 + s3)/3$, where $s1$ is the first score, $s2$ is the second score, $s3$ is the third score, and avg is the computed average. Suppose your program already has the variables called `score1`, `score2`, and `score3` that store the scores of three tests. Complete the following statement that creates a new variable called `averageScore` which stores the average score defined using the formula and variables above. Fill in each blank with one variable, one operator, or one arithmetic symbol.

```
let _____ = _____ + _____ _____ 3;
```

Grading scheme:

- [1 pt] per blank

Question 5. (7 points)

Suppose your program has variables that store people's names. Let's say there is a variable called `fullName1` that stores a person's full name (first, middle, and last names as one string variable) and another variable called `firstName2` that stores the user's first name. Complete the following JavaScript statement that checks whether the user's first name is a substring of the full name variable. If it is a substring, set the given boolean variable to `true`, otherwise, set it to `false`.

```
let isSubstring = false;
```

```
if( _____.( _____ ( _____ ) )
```

```
_____ = _____;
```

```
else
```

```
_____ = _____;
```

Grading scheme:

- [1 pt] per blank

Question 6. (5 points)

Suppose you asked the user to enter the number of calories they consumed in a meal. The user entered a number, which is stored in your program's variable called `lunch`. Using this variable, you want to display an alert to the user indicating they ate a "light meal" if the number of calories is less than 300 and a "hearty meal" otherwise. Write the partial program using JavaScript code below.

Grading scheme:

- [1 pt] Correct use of variables
- [1 pt] Correct message parameters passed to method
- [1 pt] Correct use of the `alert` method
- [1 pt] Correct result depending on the user value
- [1 pt] Correct syntax

Question 7. (4 points)

Researchers have identified different aspects of human cognition, including: knowledge representation, reasoning, decision making, learning, and language. Explain what each of these terms means and why each of them is relevant to AI.

Grading scheme:

- [2 pt] Concept definition
- [2 pt] Relevance to AI