

Class Test (2) Examination: Spring-2023
Course Code: CIS 133 (Batch: 17)
Course Title: Website Development Essential

Time: 30 Minutes

Total Marks: 15

-
1. What do you mean by attributes in HTML? Write any five attributes indicating what they do or what they mean? [4]
 2. Create a table as shown below using HTML tag: [5]

Sleeping	Studying	Playing
Helping		Eating
Listening		
Speaking	Writing	Drawing

3. Create a HTML Form to take user input as follows [6]

NAME	<input type="text"/>
EDUCATION	<input type="text"/> SSC <input checked="" type="checkbox"/> HSC <input type="checkbox"/> O LEVEL <input type="checkbox"/> IIT JEE
GENDER	<input checked="" type="radio"/> MALE <input type="radio"/> FEMALE
HOBBY	<input checked="" type="checkbox"/> PLAYING <input type="checkbox"/> SINGING <input type="checkbox"/> READING <input type="checkbox"/> OTHERS
REMARKS	<input type="text"/>
	<input type="button" value="SEND"/> <input type="button" value="REFRESH"/>

Class Test (3) Examination: Spring-2023

Course Code: CIS 133 (Batch: 17)

Course Title: Website Development Essential

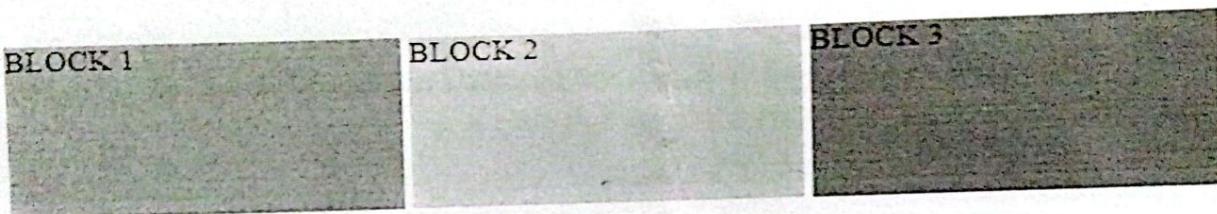
Total Marks: 15

Time: 30 Minutes

1. What is the difference between "padding" and "margin" used in CSS styles? Draw a figure to show conceptual margin and padding of an HTML element. [4]
2. Design the following page using internal CSS. [6]

WEB DEVELOPMENT

Cascading Style Sheets(CSS)



3. Write HTML and CSS code to design the following page using internal CSS. [5]

I am blue

oh boy, I wish I were red

If its yellow, let it mellow



Daffodil International University
Department of Computing and Information System
Faculty of Science & Information Technology
Final Examination, Spring 2023
Course Code: CIS 133, Course Title: Website Development Essentials

Time: 02:00 Hours

Marks: 40

(Answer all the following questions)

*[The figures in the right margin indicate the full marks and corresponding course outcomes.
All portions of each question must be answered sequentially.]*

1.
 - a) URL is a reference to a web resource that specifies its location on a computer network and a mechanism for retrieving it. Design a URL for your e-commerce site and describe each part of the URL. [2] CO1
 - b) A web page is a document that is suitable to act as a web resource on the world wide web (WWW). Briefly describe different types of web pages. Also describe the technologies needed for building each type of web page. [5] CO3
 - c) Differentiate between WWW and Internet. Is it mandatory to use web server in the WWW? [3] CO1

2.
 - a) Create a HTML form to take user input as follows: [5] CO2
 - i. Your name (text)
 - ii. Date of Birth (3 field – day/month/year) (all three field will have drop down selection)
 - iii. Gender (radio button)
 - iv. Favorite season (can give multiple choice) *check*
 - v. Address (big text option)

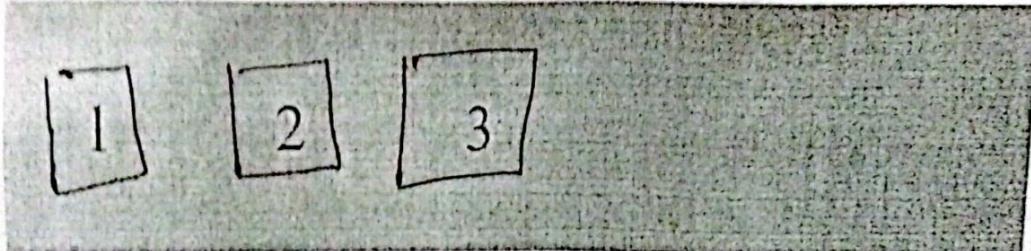
 - b) What are problems for full implementation of Voice over IP (VoIP)? Do you think we will stop using the telephone network very soon? [3] CO4

 - c) Write down the HTML code for the following table: [2] CO2

Machine Learning	Deep Learning	Cloud Computing
IOT	Robotics	Blockchain
	Cyber security	Artificial Intelligence
Natural Language Processing		

3. a) Explain the meaning of the following CSS properties and give examples [4] of the possible values they might have. Write an example rule that uses all CO2 of these properties
- Margin
 - Border
 - Float
 - Display
- b) Explain the difference between the class and id selectors. Explain a [3] CO2 situation when a HTML tag needs to be assigned both an id selector and a class selector?

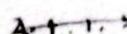
- c)



[3] CO3

This webpage has background color green and box color red. Now design the above webpage using internal CSS.

- ✓ a) Discuss Bootstrap table and various classes that can change the appearance [4] of the table? CO3
- ✓ b) What is the Bootstrap grid system? How can you add dismissible [3] CO4 functionality to an alert in Bootstrap.
- c) Website publishing is a process of publishing or uploading original content [3] CO5 on Internet. What are the major steps in website publishing?



Class Test (I) Examination: Spring-2023

Course Code: COF101 (Batch: 17)

Course Title: Computer Fundamentals

Total Mar

Time: 30 Minutes

- 1 Describe the impact of digitalization on the society.
- 2 Which device is solely responsible for overall performance of the computer? If it is microprocessor then justify your answer.
- 3 Describes different types of computer components with a proper diagram.

I. Express

A. Suggest example the following

Department of Computing and Information System (CIS)

Course Title: Computer Fundamentals

Quiz-3, Time-35

Time: 35 Mins

Total Marks: 15

1. Explain ~~with~~ relevant example how operating system manages the memory. [4]
2. Briefly explain ~~with~~ relevant example the following terms of the cryptography-Plain text, cypher text, encryption and decryption. [6]
3. Briefly explain the 3 security objectives to protect any network system. [5]

(Answer all the following questions)

[The figures in the right margin indicate full marks for the respective questions]

1.	Questions	Marks	
	(a) Justify the reasons why the performance of Pentium series microprocessor is better than 8086 microprocessor?	[4]	CLO-4
	(b) Is it true that RAM and Cache memory is responsible for performance of the computer, if yes then justify with relevant example? Which device of the computer is solely responsible for overall performance of the computer	[6]	CLO-4

2.	Questions	Marks	
	(a) Explain the features of the following architecture of the microprocessor -Reduced Instruction Set Computer (RISC), Reduced Instruction Set Computer (CISC).	[5]	CLO-1
	(b) The central processing unit (CPU) is the primary component of any digital computer system. Briefly explain with block diagram how microprocessor works.	[1+4]	CLO-1

Page No. _____

Questions		Marks	
(a)	List down the main functions of windows operating system then explain the process management of the operating system/CPU scheduling.	[6]	CLO-2
(b)	Convert the following decimal number-258 to binary and hexadecimal number-d5 to binary.	[4]	CLO-2
Questions		Marks	
(a)	Define the term malware and provide some example of malware.	[3]	CLO-3
(b)	Briefly explain with relevant example the following terms of the cryptography-encryption and decryption.	[4]	CLO-3
(c)	Briefly explain the impact of digitalization in the society.	[3]	CLO-3



Department of Computing and Information System

Mid Term Examination: Spring Semester-2023

Program: B.Sc. in CIS

Course Code: COF101

Course Title: Computer Fundamentals

Time: 1.5 Hours

Total Marks: 25

1. Justify the reasons why the performance of "I" series microprocessor is better than Pentium series microprocessor? Marks [4], [CLO-1,3]

2. The central processing unit (CPU) is the primary component of any digital computer system. Explain with block diagram how microprocessor works. Mark [6], [CLO-3]

3. Explain the features of the following architecture of the microprocessor -Reduced Instruction Set Computer (RISC), Reduced Instruction Set Computer (CISC). Marks [4], [CLO-3]

4. What do you understand by Arithmetic and Logic Unit (ALU)? And explain with diagram how it works. Marks [4], [CLO-3]

Convert the following decimal number-294 to binary and hexadecimal number-b5 to binary. Marks[4], [CLO-2]

5. How digitization creates new carrier opportunities and discussed the Impact of digitization in our society. Mark [3], [CLO-1, 5,6]

6

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Daffodil International University

Department of Computer & Information System

Faculty of Science & Information Technology

Final Examination, Spring-2023

Course Code: ENGLISH 101

Course Title: English Language-01

Batch: CIS-17

Teacher: Md. Asraful Islam (AI)

Time: 2:00 Hours

Marks: 40

Answer ALL Questions

[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered.]

1.	Explain Skimming & Scanning with their characteristics. Discover the various types of Reading techniques with example.	[Marks-08]	CLO-03 PLO-06 Level-02
2.	Compare Yes/No questions with W/H questions with appropriate example. Do you familiar with English Modal Verbs? Organize them in a Chart.	[Marks-08]	CLO-02 PLO-03 Level-03
3.	<p>Read the passage and answer the questions that follow.</p> <p>AS we are living in an era where technological changes are taking place rapidly with coding garnering a lot of importance, there has been a sort of haste among parents to enroll their kids as early as five in coding classes.</p> <p>This has led to a hot debate among parents on whether this subject is being taught too early. While several studies reveal the benefits of studying coding at an early age, there are those who think that it may affect the brains of children who have not yet learned to speak well, and prevent them from engaging with the real world.</p> <p>Parveen Kaswan, an Indian forest service officer, pointed out that some parents believe children should learn cycling, skating, swimming and karate instead of spending more time in front of screens.</p> <p>Others feel spending an hour a day to learn coding is not too taxing since children have the ability to learn and enjoy multiple activities during childhood.</p> <p><i>How young is too young to study how to code?</i></p> <p>In order to answer this concern properly, we need to identify what we mean by "coding" and consider the developmental capacities of our children, as well as the ability of our current education system to</p>	[Marks-05]	CLO-03 PLO-03 Level-01

provide and teach coding meaningfully to young learners.

According to experts, it is not wrong for parents to introduce this "alien" language to their children as early as five, as long as it is done the right way.

For instance, as exposing children to computers at a tender age might not be good for their wellbeing and development, this subject can be taught through hands-on activities like playing board games or using technical toys.

This will reinforce basic coding skills and at the same time allow children to test their creativity and logical thinking.

At around 10 years of age when they are familiar with the basic concepts of mathematics, they can be exposed to learning coding via the computer. While some parents might think that this is just going to increase their children's screen time, think again.

What we should do as parents is to take a more pragmatic view, and maximise their screen time for potential gains.

In fact, research has shown that educational screen time is linked to doing better in school and has no adverse health effects, but it is apt to engage in it with peers/siblings, as a means to promote social interaction.

Interestingly, in some countries like Singapore, Israel and the United Arab Emirates, coding is now deemed to be an essential school subject like English or Maths. In Malaysia, learning coding is not something new as it has been introduced in the school curriculum in 2016, starting with Year 6.

In fact, the Education Ministry has been cooperating with the Malaysia Digital Economy Corporation to train primary school teachers in coding to provide a high quality of education.

Experts believe learning coding is a perfect platform for young people to foster their entrepreneurial outlook, a way of thinking that enables one to be able to overcome challenges, be decisive and accept responsibility for any outcome, whether success or failure.

How can coding relate to entrepreneurial outlook?

Throughout the coding journey, it is a norm to fail at first (in fact, many times) and go through many experimental attempts to execute the desired output. The value that can be gained is resilience, which is a critical element of becoming an efficacious person sought after by employers.

Although learning to code is worthwhile, merely knowing how to code does not guarantee a lucrative career. Why? Because knowing how to

code today does not mean you will know how to code tomorrow, as these languages change quickly.

According to Jeff Hammond, a vice-president and principal analyst at Forrester, an American market research company, with his 30 years' experience, he discovered that coding languages change, frameworks change, vendors change, but implementation patterns tend to repeat.

Nevertheless, with skills children gain from learning to code, they can apply what they already know when new technologies emerge.

All in all, encouraging children to take up coding at a very young age will not overwhelm them, as long as it is done appropriately. It will equip them with the necessary skills for the future.

Choose the correct answer:

- 01. What is the debate among parents?
 - a. Whether coding is necessary
 - b. The right age to teach coding
 - c. Early teaching can lead to better results
 - d. Ban coding as a subject

- 02. Parveen Kaswan, an Indian forest service officer opines, many parents want their children to learn:
 - a. Video games
 - b. C++
 - c. Physical sports
 - d. Computing

- 03. Alternate way of teaching code to children may involve _____
 - a. Computers
 - b. Board games
 - c. none
 - d. Smartphones

- 04. Jeff Hammond observes that the outward language may vary significantly from language to language while coding but the inherent _____ remains the same.
 - a. Syntax
 - b. Words
 - c. Commands
 - d. Patterns

05. The skills children learn from coding are _____ in other technologies.

- a. Transferable
- b. Not applicable
- c. Unusable
- d. Emergent

Barriers

4. Propose the key elements for a successful communication & demonstrate the types of Communication. What are the main barriers of a successful communication & how can we overcome it.

[Marks-07]

CLO-03
PLO-03
Level-03

5. Nowadays university education is considered very important for people's future. However, there are a lot of successful people who didn't get higher education.

CLO-04
PLO-07
Level-02

- Do you think that higher education is necessary to succeed in life?
- Justify your opinion with relevant examples.

06. What is Formal, Informal & Semi formal communication? Build up five formal sentences at your own.

Marks-05

CLO-01
PLO-05
Level-03

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Daffodil International University

Department of Computing & Information System

Faculty of Science and Information Technology

Midterm Examination, Spring-2023

Course Code: ENGLISH 101

Course Title: ENGLISH-I

Batch: 17

Teacher: Md. Asraful Islam

Time: 1:30 Hours

Marks: 25

Answer ALL Questions

[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered sequentially.]

1. Show the helping verb of present, past and future tense (Active sense) in sentences.

[Marks-5]

2. Interpret the basic difference between Active and Passive voice with structure and example of present, past and future tense.

[Marks-5]

3. Read the following sentences and make the proper use of the rules of Subject-Verb Agreement.

[Marks-5]

- a) It (be) many years since I came to America.
- b) The storm (start) before the rain started.
- c) The boy came after the sun (rise).
- d) Slow and steady (won) the race..
- e) You would rather (left) travelling.

4. Read the passage and relate with the questions that follow.

[Marks-5]

Apple is moving forward with self-driving car technology and is targeting 2024 to produce a passenger vehicle that could include its own battery technology, people familiar with the matter told Reuters.

The iPhone maker's automotive efforts, known as Project Titan, have proceeded unevenly since 2014 when it first started to design its own vehicle from scratch. At one point, Apple scaled back the effort to focus on software and reassessed its goals. Doug Field, an Apple veteran who had worked at Tesla, returned to oversee the project in 2018 and laid off 190 people from the team in 2019.

Since then, Apple has progressed enough that it now aims to build a vehicle for consumers, two people familiar with the effort said, asking not to be named because Apple's plans are not public. The company's goal of building a personal vehicle for the mass market contrasts with rivals such as Alphabet's Waymo, which has built robo-taxis to carry passengers for a driverless ride-hailing service.



Central to Apple's strategy is a new battery design that could "radically" reduce the cost of batteries and increase the vehicle's range, according to a third person who has seen Apple's battery design. Apple declined to comment on its plans or future products.

Making a vehicle represents a supply chain challenge even for Apple, a company with deep pockets that makes hundreds of millions of electronics products each year with parts from around the world, but has never made a car. It took Elon Musk's Tesla 17 years before it finally turned a sustained profit-making cars.

"If there is one company on the planet that has the resources to do that, it's probably Apple. But at the same time, it's not a cellphone," said a person who worked on Project Titan.

It remains unclear who would assemble an Apple-branded car, but sources have said they expect the company to rely on a manufacturing partner to build vehicles. And there is still a chance Apple will decide to reduce the scope of its efforts to an autonomous driving system that would be integrated with a car made by a traditional automaker.

Two people with knowledge of Apple's plans warned pandemic-related delays could push the start of production into 2025 or beyond.

Apple has decided to tap outside partners for elements of the system, including "lidar" sensors, which help self-driving cars get a three-dimensional view of the road, two people familiar with the company's plans said.

Some sensors could be derived from Apple's internally developed lidar units, that person said. Apple's iPhone 12 Pro and iPad Pro models released this year both feature lidar sensors.

As for the car's battery, Apple plans to use a unique "monocell" design that bulks up the individual cells in the battery and frees up space inside the battery pack, one of the people said. That design means more active material can be packed inside the battery, giving the car a potentially longer range.

Apple is also examining a chemistry for the battery called LFP, or lithium iron phosphate, the person said, which is inherently less likely to overheat and is thus safer than other types of lithium-ion batteries.

"It's next level," the person said of Apple's battery technology. "Like the first time you saw the iPhone."

Identify the given statements as Yes/No/Not Given.

- a. By 2024 Apple plans to create its own self-driving car.
- b. Inclusion of Apple's own technology in the car is a possibility.
- c. The Project Titan achieved success since the moment of its inception.
- d. Apple plans to integrate the most intricate technology in the vehicle.
- e. Apple's battery will help to minimize the cost of production of the cars.

5. Formulate a short composition about Bangabandhu Satellite-I at your own. [Marks-5]

The Bangabandhu Satellite-I is the first Bangladeshi geostationary communication satellite that has been named after the father of the nation.....

on satellite is a center of science. It helps many in India, a speech center

Quiz 1

1. Define LCM and HCF with a suitable example.
2. Evaluate the prime factorization of 1600.
3. Find all the composite factors of 1240.
4. The HCF of two numbers is 15 and their LCM is 651. If one of the numbers is 45, find the other.

$$\begin{array}{c} (3+1) \quad (5+1) \quad (1+1) \\ \times \quad \times \quad \times \\ 3 \times 2 \times 5 \\ = 15 \end{array}$$



Daffodil International University
Faculty of Science and Information Technology
Department of Computing & Information System (CIS)
Program: B.Sc. in Computing & Information System
Midterm Examination, Semester: Spring-2023

Course Code: MAT 101
Time: 1.5 Hours

Course Title: Mathematics I

Credit Hours: 3.0
Total Marks: 25

Name & Designation of the Examiner: Md. Mozammelul Haque (MMH), Lecturer

1. Explain the concept of Prime Factorization, LCM, HCF, Exponent, and Radical with suitable examples. 5

[CLO-1, PLO-1, C/L-2]

2. List out all the factors of 1600 using prime factorization. 5

[CLO-1, PLO-3, C/L-4]

3. Evaluate the HCF and LCM of 0.63, 10.5, and 2.1. 5

[CLO-1, PLO-3, C/L-5]

4. i. Identify the values of a and b if $a + \sqrt{6} b = \frac{13+\sqrt{6}}{13-\sqrt{6}}$ • 3+3=6
- ii. If $2^x + 2^{1-x} = 3$ then identify the value of x .

[CLO-2, PLO-3, C/L-3]

5. Identify the logarithm of 1728 to the base $2\sqrt{3}$. 4

[CLO-2, PLO-3, C/L-3]



Daffodil International University
Faculty of Science and Information Technology
Department of Computing & Information System (CIS)
Program: B.Sc. in Computing & Information System
Final Examination, Semester: Spring-2023

Course Code: MAT 101
Time: 2.0 Hours

Course Title: Mathematics I

Credit Hours: 3.0
Total Marks: 40

Name & Designation of the Examiner: Md. Mozammelul Haque (MMH), Lecturer

1. Identify the solution of the following equation using remainder theorem 4
$$3x^3 - 26x^2 + 52x - 24 = 0$$

[CLO-2, PLO-2, C/L-3]

2. Explain the concept of maximum and minimum values of a function. 3

[CLO-3, PLO-1, C/L-2]

3. Construct the differential coefficient $\left(\frac{dy}{dx}\right)$ of the following functions: 4+6=10

i. $y = \ln(x + \sqrt{5 + x^2})$

ii. $y = x^{\cos^{-1}(\ln x)} + (\sin x)^{(\tan^{-1} x^3)}$

[CLO-3, PLO-4, C/L-3]

4. Analyze the maxima and minima of the following function 5

$$f(x) = \frac{x^5}{5} - \frac{x^4}{4}$$

[CLO-3, PLO-4, C/L-4]

3+2+5=

5. Evaluate the following:

i. $\int x^2 \sin x \, dx$

ii. $\int \ln x \, dx$

iii. $\int \frac{1}{(1+x^2)^3} \, dx$

[CLO-4, PLO-3, C/L-5]

i. Analyze the nature of the following equation

$$2x^2 - 3xy + y^2 - 5x + 4y + 6 = 0$$

3+5=8

ii. List the following point into Cartesian and Cylindrical coordinate systems

$$P(4, \pi/2, \pi/6)$$

[CLO-5, PLO-4, C/L-4]



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Class Test (1) Examination: Spring-2023

Course Code: CIS 122

Course Title: Structured Programming

Time: 30 Minutes

Total Marks: 15

1. What is computer programming? Describe the different types of programming approaches.
2. Write the difference between interpreter vs compiler.
3. Write down the rules for identifiers.

Class Test (3) Examination: Spring-2023

Course Code: CIS 122

Course Title: Structured Programming

Time: 30 Minutes

Total Marks: 15

-
1. Describe the declaration and initialization of an array in C programming. [6]
 2. Demonstrate the notion of an array in C programming language. [2]
 3. Write a program to sum up the even elements of an array. [7]

Class Test (2) Examination: Spring-2023
Course Code: CIS 122
Course Title: Structured Programming

52
109
202.2
52

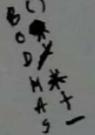
Time: 30 Minutes

Total Marks:

1. Describe different types of operators in C programming with examples?

2. Solve the below expression:

- $6 * 2 / (2 + 1 * 2 / 3 + 6) + 8 * (8 / 4)$
- $!(x > 10) \&\& (y == 2)$

$$\begin{aligned} x &= 1 \\ y &= 2 \end{aligned}$$


3. Find the Syntax Error of the below code:

```
#includ <stdio.h>
#includ <conio.h>
void main()
{
    int num,res=0;
    clrscr();
    Printf("\nENTER A NUMBER: ");
    scan("%ld",&num)
    res=primeNumber(num);
    If(res==0);
        printf("\n%d IS A PRIME NUMBER",num);
    Else
        printf("\n%d IS NOT A PRIME NUMBER",num)
}
```

```
double prime(float n)
{
    int i;
    for(i=2;i<=n/2;i++)
    {
        if(n%i!=0);
            continue;
        else
            return 1;
    }
    return 1;
}
```

Faculty of Science & Information Technology

Department of Computing and Information System (CIS)

Final Exam, Spring-2023

Batch 17: Section A

Course Code: CIS 115

Course Title: Structured Programming

Time: 2 Hours

Total Marks: 40

(The figure of the right margin indicates the marks)

(You need to answer all of the following question)

PART-A

Brief Answer Question

5*2=10 CLO1

1. i. Write the difference between `scanf()` and `gets()` function. CLO2
ii. Explain the terms call by value and call by reference in a function.
iii. What do know about **unary**, **increment** and **decrement operator**?
iv. How does the assignment operator (`=`) differ from the equality operator (`==`) in C?
v. What are the differences between **int**, **double** and **float** variables. Give explanations.

PART-B

Long Answer Question

A compiler is a software tool that translates source code written in a high-level programming language into machine code or bytecode that can be executed directly by a computer. The process of translation performed by a compiler is called compilation.

CLO1

- a. Explain the basic C program compilation process with a diagram. 4
b. Write down the difference between compiler and interpreter. 3
c. What will be the output of the following expressions in C. 3
- i. $7*5 / (3+2*3/12+8) + 15 * (1*10 / 5)$
ii. Consider $i = 2$, $j = 11.5$, $k = 7$ and $l = 'd'$, answer what will be the output of the relationship: $((i < j) \parallel (k \neq l)) \&\& !(j+k \geq 7)$

3 Carefully observe the code snippet and answer the following questions:

```
#includ <Stdio.h>
#include <Conio.h>
int PrimeNot(int)
Void main()
{
    int n1,prime;
    printf("\n\n Function : check whether a number is prime number or not :\n");
    printf("-----\n");

    print(" Input a positive number : ");
    Scanf("%f",&n1);
    prime = PrimeOrNot(n1);
    If(prime==1):
        printf(" The number % is a prime number.\n": &n1)
    Else
        printf(" The number %d is not a prime number.\n": &n1)
    return 0;
}

int Prime(int n1):
{
    int i=2;
    while(i<=n1/2)
    {
        If(n1%i==0)
            return 0;
        Else
            i++;
    }
    return 1;
}
```

$i = 2$
 $2 \leq \frac{5}{2}$
 $2 \leq 2$
 $2 \nmid \frac{5}{2}$
 $2 \nmid 5$

- a. Identify syntax errors and refactor those errors in the above code snippet. Just rewrite the program and solve all the errors.

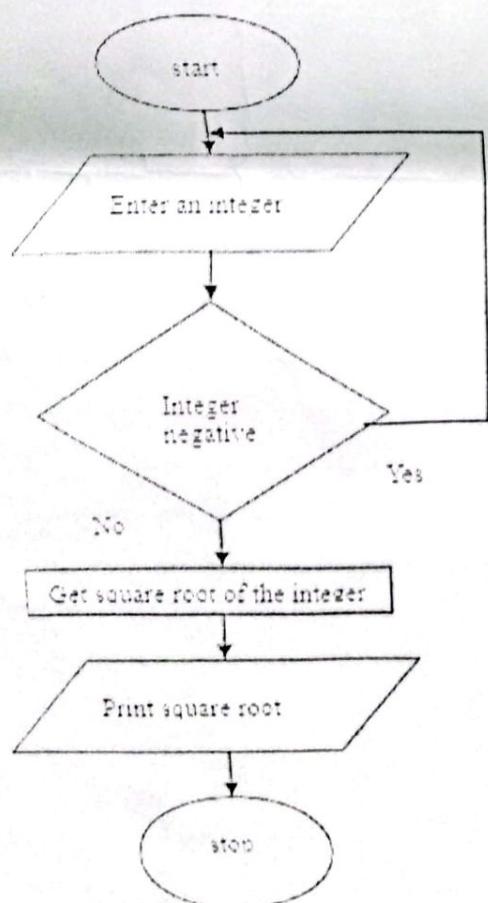
- a. Suppose you are a billionaire and you have 3 luxury cars, Ferrari, Mercedes and Bmw. Every day you go to your office to look after your business but your office is not near your home and you need to refuel your car from a patrol pump. You use your cars depends on the amount of petrol you can get from that pump. Now there can be 4 conditions which are given below.

1. You ride in Ferrari if the pump has more than 100 litre of petrol
2. You ride in Mercedes if the pump has less than 50 litre of petrol
3. You use Bmw if you have more than 50 litre but less than 100 litre of petrol.
4. Otherwise, you walk for your office

5

Now solve the scenario by writing a C program.

- b. Carefully see the program flowchart used to solve a mathematical problem. Use it to answer the question that follows.



5

Write a C program to implement the program logic in the flowchart.