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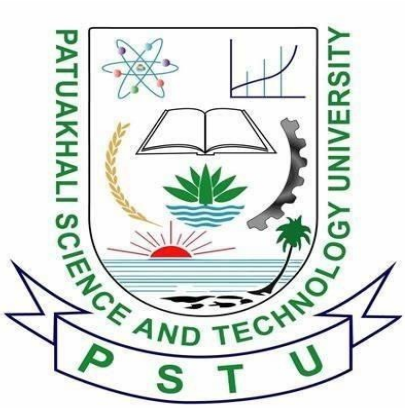

Course Code: CCE-121

SUBMITTED TO:

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Java Chapter 2

2.1 Fill in the gaps:

a. Left Brance, Right Brance.
b. If, else
c. //
d. Space characters, new lines and tabs
e. Keywords
f. Main
g. System.out.print, println, printf.

2.2 True or False:

a. False
b. True
c. False
d. True
e. False

2.3 Write statements to accomplish each of the following tasks

a.

```
1  class assignment3{
2      public static void main(String[] args) {
3          int c, thisIsAVariable, q76354 , number;
4      }
5  }
```

b.

```
import java.util.Scanner;

class assignment3{
    public static void main(String[] args) {
        Scanner s =new Scanner(System.in);
        int n=s.nextInt();
    }
}
```

c.

```
import java.util.Scanner;

class assignment3{
    public static void main(String[] args) {
```

```
        Scanner s =new Scanner(System.in);
        int n=s.nextInt();
        int z=n;
    }
}
```

d.

```
Administrator: Windows Po\
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Acer\OneDrive\Desktop\Assignment 3> java -version
openjdk version "17.0.8" 2023-07-18
OpenJDK Runtime Environment Temurin-17.0.8+7 (build 17.0.8+7)
OpenJDK 64-Bit Server VM Temurin-17.0.8+7 (build 17.0.8+7, mixed mode, sharing)
PS C:\Users\Acer\OneDrive\Desktop\Assignment 3> javac assignment3
error: Class names, 'assignment3', are only accepted if annotation processing is explicitly requested
1 error
PS C:\Users\Acer\OneDrive\Desktop\Assignment 3> javac assignment3.java
PS C:\Users\Acer\OneDrive\Desktop\Assignment 3> java assignment3
This is a Java program
PS C:\Users\Acer\OneDrive\Desktop\Assignment 3>
```

e.

```
PS C:\Users\Acer\OneDrive\Desktop\Assignment 3> javac Assignment3.java
PS C:\Users\Acer\OneDrive\Desktop\Assignment 3> java assignment3
This is a
Java program
PS C:\Users\Acer\OneDrive\Desktop\Assignment 3>
```

f.

```
import java.util.Scanner;

class assignment3{
    public static void main(String[] args) {
        Scanner s= new Scanner(System.in);
        int n=s.nextInt();
        if(n!=7)
        System.out.println("The variable number is not equal to 7");
        else
        System.out.println("This is number 7");
    }
}
```

2.4 Identify and correct the errors in each of the following statements:

a) if (c < 7);
System.out.println("c is less than 7");
Answer: No semicolon after if statement.

b) if (c => 7)
System.out.println("c is equal to or greater than 7");
Answer:No errors.

2.5 Write declarations, statements or comments that accomplish each of the following tasks:

a. // Calculate the product of three integers
b. Scanner input = new Scanner(System.in);
c. int x, y, z, result;
d. System.out.print("Enter first integer: ");
e. x = input.nextInt();
f. System.out.print("Enter second integer: ");
g. y = input.nextInt();
h. System.out.print("Enter third integer: ");
i. z = input.nextInt();
j. result = x * y * z;
k. System.out.printf("Product is %d%n", result);

2.6 Using the statements you wrote in Exercise 2.5, write a complete program that calculates and prints the product of three integers

```
3  import java.util.Scanner;
4
5  class assignment3{
6      public static void main(String[] args) {
7          // Calculate the product of three integers
8           Scanner input = new Scanner(System.in);
9           int x, y, z, result;
10          System.out.print("Enter first integer: ");
11          x = input.nextInt();
12          System.out.print("Enter second integer: ");
13          y = input.nextInt();
14          System.out.print("Enter third integer: ");
15          z = input.nextInt();
16          result = x * y * z;
17          System.out.printf("Product is %d%n", result);
18
19     }
20 }
```

2.7 Fill in the gaps

a. Comments

b. if condition

c. Arithmatic

d. Division, Reminder

e. InnerMost

f. Varieble

2.8 Write Java statements that accomplish each of the following tasks:

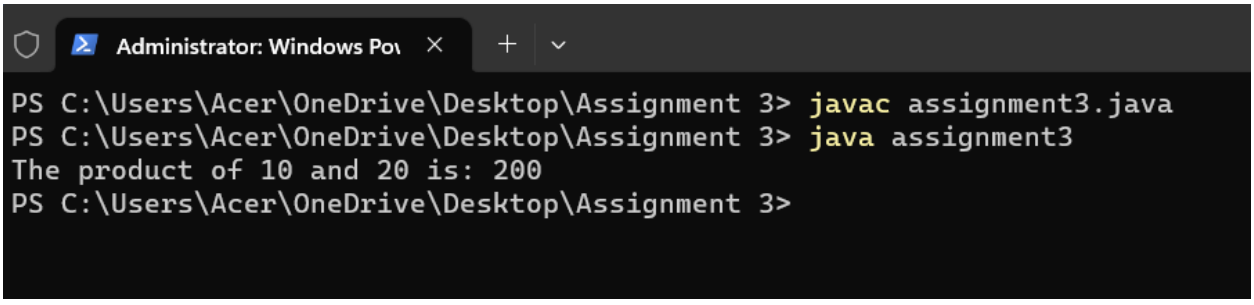
a.

```
class assignment3{
    public static void main(String[] args) {
        System.out.print("Enter an Integer");

    }
}
```

b.

```
class assignment3{
    public static void main(String[] args) {
        int a=10,b=20;
        int c=a*b;

    }
}
```

c.



2.9 True False

a. True

b. False. C.A.: !a is not correct

c. False. C.A.: / has highest Precedence.

d. True

2.10

a. x = 6

b. Value of 5 * 1 is 5

c. x is 5 and y is 1

d. 6 is not equal to 5

2.11

a & d are modified

2.12

a, b, d statements are correct

2.13

a. 15

b. 3

c. 324

2.14

a. System.out.println(“1 2 3 4”);

b. System.out.print(“1 ”);

System.out.print(“2 ”);

System.out.print(“3 ”);

System.out.print(“4 ”);

c. System.out.printf(“1 2 3 4”);

2.15

Step 1: inputting 2 integer.

Step2: square 2 different values 2 different time

Step3: Sum the 2 square value's

Step4: print the value of sum

2.16

```
import java.util.Scanner;

class assignment3{
    public static void main(String[] args) {
        Scanner s= new Scanner(System.in);
        int n=s.nextInt();
        if(n>100)
        System.out.println("Greater than 100");
        else if(n==100)
        System.out.println("Equal to 100");
        else if(n<100)
        System.out.println("Smaller than 100");

     }
}
```

2.17

```
import java.util.Scanner;

class assignment3{
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);

        System.out.print("Enter the first integer: ");
        int num1 = input.nextInt();

        System.out.print("Enter the second integer: ");
        int num2 = input.nextInt();

        System.out.print("Enter the third integer: ");
        int num3 = input.nextInt();

        // Calculate the sum
```

```
        int sum = num1 + num2 + num3;

        // Calculate the average (as an integer)
        int average = sum / 3;

        // Calculate the product
        int product = num1 * num2 * num3;

        // Find the smallest number
        int smallest = Math.min(Math.min(num1, num2), num3);

        // Find the largest number
        int largest = Math.max(Math.max(num1, num2), num3);

        // Display the results
        System.out.println("Sum: " + sum);
        System.out.println("Average (as an integer): " + average);
        System.out.println("Product: " + product);
        System.out.println("Smallest: " + smallest);
        System.out.println("Largest: " + largest);
    }
}
```

2.19

```
 *
 **
 ***
 ****
 *****
```

2.20

```
*
***
*****
****
**
```

2.21

```
***************
```

2.22

```
****
*****
******
```

2.23

```
 *
 ***
 *****
```

2.24

```java
import java.util.Scanner;

class assignment3{
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);

        System.out.print("Enter the first integer: ");
        int num1 = input.nextInt();

        System.out.print("Enter the second integer: ");
        int num2 = input.nextInt();

        System.out.print("Enter the third integer: ");
        int num3 = input.nextInt();

        System.out.print("Enter the fourth integer: ");
        int num4 = input.nextInt();

        System.out.print("Enter the fifth integer: ");
        int num5 = input.nextInt();

        int largest = num1;
        int smallest = num1;
```

```
        if (num2 > largest) {
            largest = num2;
        } else if (num2 < smallest) {
            smallest = num2;
        }
        if (num3 > largest) {
            largest = num3;
        } else if (num3 < smallest) {
            smallest = num3;
        }
        if (num4 > largest) {
            largest = num4;
        } else if (num4 < smallest) {
            smallest = num4;
        }
         if (num5 > largest) {
            largest = num5;
        } else if (num5 < smallest) {
            smallest = num5;
        }
         System.out.println("Largest integer is: " + largest);
        System.out.println("Smallest integer is: " + smallest);
    }
}
```

2.25

```
import java.util.Scanner;

class assignment3{
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);

        System.out.print("Enter an integer: ");
        int number = input.nextInt();

        if (number % 3 == 0) {
            System.out.println(number + " is divisible by 3.");
        } else {
            System.out.println(number + " is not divisible by 3.");
        }

    }
}
```

2.26

```
import java.util.Scanner;

class assignment3{
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);

        System.out.print("Enter the first integer: ");
        int num1 = input.nextInt();

        System.out.print("Enter the second integer: ");
        int num2 = input.nextInt();
        int tripledNum1 = num1 * 3;
        int doubledNum2 = num2 * 2;
          if (tripledNum1 % doubledNum2 == 0) {
            System.out.println(tripledNum1 + " is a multiple of " + doubledNum2);
        } else {
            System.out.println(tripledNum1 + " is not a multiple of " +
doubledNum2);
        }

    }
}
```

2.27

```
class assignment3{
    public static void main(String[] args) {
        System.out.println("* * * * * * * *");
        System.out.println(" * * * * * * * *");
        System.out.println("* * * * * * * *");
        System.out.println(" * * * * * * * *");
        System.out.println("* * * * * * * *");
        System.out.println(" * * * * * * * *");

    }
}
```

2.28

```
import java.util.Scanner;

class assignment3{
    public static void main(String[] args) {
```

```
        System.out.println("Enter radius:");
        Scanner s=new Scanner(System.in);
        double d=s.nextDouble();
        System.out.println("The perimeter of the circle is: "+2*3.1416*d);
        System.out.println("The Area of the circle is: "+3.1416*d*d);

    }
}
```

2.30

```
import java.util.Scanner;

class assignment3{
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter a five-digit number: ");
        String userInput = scanner.nextLine();

        // Check if the input has exactly five digits
        if (userInput.length() != 5 || !userInput.matches("\\d+")) {
            System.out.println("Please enter a valid five-digit number.");
        } else {
            // Separate the digits and print them with three spaces between each
digit
            char[] digits = userInput.toCharArray();
            StringBuilder separatedDigits = new StringBuilder();

            for (int i = 0; i < digits.length; i++) {
                separatedDigits.append(digits[i]);
                if (i < digits.length - 1) {
                    separatedDigits.append("   ");
                }
            }

            System.out.println("Digits separated by three spaces: " +
separatedDigits);
        }
    }
}
```

2.31

```
class assignment3{
    public static void main(String[] args) {
       System.out.println("Number   Square   Cube");
        for(int i=1;i<=10;i++)
       {
        System.out.println(i+"        "+i*i+"     "+i*i*i);
       }
    }
}
```

2.32

```
import java.util.Scanner;

class assignment3{
    public static void main(String[] args) {
       int a,b,c,d,e;
       Scanner s=new Scanner(System.in);
       System.out.println("Enter First value:");
       a=s.nextInt();
       System.out.println("Enter Second value:");
       b=s.nextInt();
       System.out.println("Enter Third value:");
       c=s.nextInt();
       System.out.println("Enter Fourth value:");
       d=s.nextInt();
       System.out.println("Enter Fifth value:");
       e=s.nextInt();
       int pos=0,neg=0,zer=0;
       if(a>0)
       pos++;
       if(b>0)
        pos++;
        if(c>0)
       pos++;
       if(d>0)
        pos++;
        if(e>0)
        pos++;
        if(a<0)
       neg++;
       if(b<0)
       neg++;
```

```
        if(c<0)
        neg++;
       if(d<0)
       neg++;
        if(e<0)
        neg++;
        if(a==0)
       zer++;
       if(b==0)
       zer++;
        if(c==0)
        zer++;
       if(d==0)
       zer++;
        if(e==0)
        zer++;
        System.out.println("Positive numbers: "+pos+"\nNegative numbers:
"+neg+"\nZero: "+zer);

    }
}
```

2.33

```
import java.util.Scanner;
class assignment3{
    public static void main(String[] args) {
       double weightInKilogram,heightInMeters;
       Scanner s= new Scanner(System.in);
       System.out.println("Enter weight in kg:");
       weightInKilogram=s.nextDouble();
       System.out.println("Enter height in meter: ");
       heightInMeters=s.nextDouble();
       double BMI=weightInKilogram/(heightInMeters*heightInMeters);
       System.out.println("BMI Value: "+BMI);
       System.out.println("BMI Status: ");
       if(BMI<18.5)
       System.out.println("Underweight");
       else if(BMI>=18.5 && BMI<=24.9)
       System.out.println("Normal");
```