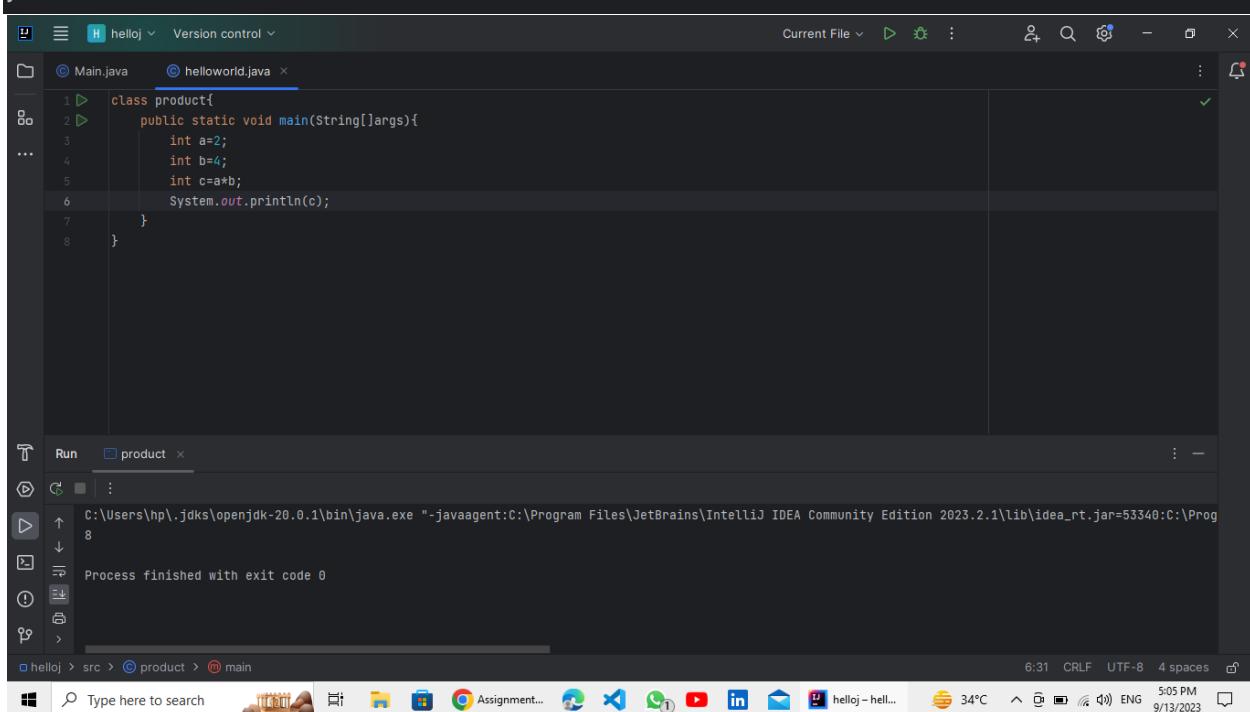


Assignments Solutions

Q1 - Take 2 integer values in two variables x and y and print their product.

Ans-

```
class product{
    public static void main(String[]args) {
        int a=2;
        int b=4;
        int c=a*b;
        System.out.println(c);
    }
}
```



The screenshot shows the IntelliJ IDEA interface with the following details:

- Project Structure:** Shows files `Main.java` and `helloworld.java`.
- Code Editor:** Displays the `product` class with the provided code.
- Run Tab:** Shows the run configuration `product` and the output window.
- Output Window:** Shows the command line output:

```
C:\Users\hp.jdk\openjdk-20.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2023.2.1\lib\idea_rt.jar=53340:C:\Program
```

8

Process finished with exit code 0
- System Tray:** Shows the taskbar with various icons and system status.

Q2 - Print the ASCII value of character 'U'.

Ans-

```
class ascii {
    public static void main(String[]args) {
        int a='U';
        System.out.println(a);
    }
}
```

The screenshot shows the IntelliJ IDEA interface. The top navigation bar includes 'Current File', 'Run', 'Search', and 'File'. The left sidebar shows a file tree with 'Main.java', 'helloworld.java', and 'ascii.java' (which is currently selected). The main code editor displays the following Java code:

```
1 class ascii {
2     public static void main(String[] args){
3         int a='U';
4         System.out.println(a);
5     }
6 }
7
```

The bottom panel shows the 'Run' tab with the configuration 'ascii'. The output window displays the command used to run the program and the resulting output: 'Process finished with exit code 0'. The status bar at the bottom right shows the time as 7:1, date as 9/13/2023, and system information including temperature (34°C) and battery level (5:09 PM).

Q3 - Write a Java program to take the length and breadth of a rectangle and print its area.

Ans-

```
class area {
    public static void main(String[] args) {
        int length=7;
        int breadth=4;
        int area=length*breadth;
        System.out.println("The area of rectangle is " +area);
    }
}
```

The screenshot shows the IntelliJ IDEA interface with a Java file named 'area.java' open. The code defines a class 'area' with a main method that calculates the area of a rectangle with length 7 and breadth 4, printing the result as 28. Below the editor is a 'Run' tool window showing the output of the run command, which includes the path to the Java executable and the printed output 'The area of rectangle is 28'. The status bar at the bottom indicates the file is saved.

```
1 > class area {
2 >     public static void main(String[] args){
3 >         int length=7;
4 >         int breadth=4;
5 >         int area=length*breadth;
6 >         System.out.println("The area of rectangle is " +area);
7 >     }
8 > }
```

Run area

C:\Users\hp\.jdks\openjdk-20.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2023.2.1\lib\idea_rt.jar=53411:C:\Prog
The area of rectangle is 28

Process finished with exit code 0

9:1 CRLF UTF-8 4 spaces

Q4 - Write a Java program to calculate the cube of a number.

Ans-

```
class cube {
    public static void main(String[] args) {
        int a=2;
        int b=a*a*a;
        System.out.println("The number is "+a);
        System.out.println("The cube of number is "+b);
    }
}
```

The screenshot shows the IntelliJ IDEA interface with a dark theme. In the top navigation bar, there are tabs for 'Current File', 'Run', 'Search', and 'Help'. Below the navigation bar is a file tree showing two files: 'area.java' and 'cube.java'. The 'cube.java' file is open in the editor, containing the following code:

```
1 import java.sql.SQLOutput;
2
3 class cube {
4     public static void main(String[] args){
5         int a=2;
6         int b=a*a*a;
7         System.out.println("The number is "+a);
8         System.out.println("The cube of number is "+b);
9     }
10 }
11
12 }
```

Below the editor is the 'Run' tool window, which displays the output of the 'cube' program. The output shows:

```
C:\Users\hp\.jdks\openjdk-20.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2023.2.1\lib\idea_rt.jar=53453:C:\Prog
The number is 2
The cube of number is 8
Process finished with exit code 0
```

The status bar at the bottom right shows the time as 8:51, date as 9/13/2023, and battery level as 5:17 PM.

Q5 - Write a Java program to swap two numbers with the help of a third variable.

Ans-

```
class swapNumber {
    public static void main(String[] args) {
        int num1=2;
        int num2=3;
        System.out.println("First number before swap "+num1);
        System.out.println("Second number before swap "+num2);
        int temp=num1;
        num1=num2;
        num2=temp;
        System.out.println("First number after swap "+num1);
        System.out.println("Second number after swap "+num2);
    }
}
```

The screenshot shows the IntelliJ IDEA interface with the following details:

- Project Bar:** Shows files `area.java`, `cube.java`, and `swapNumber.java`.
- Code Editor:** Displays the `swapNumber.java` file content:

```
1 class swapNumber {  
2     public static void main(String[] args){  
3         int num1=2;  
4         int num2=3;  
5         System.out.println("First number before swap "+num1);  
6         System.out.println("Second number before swap "+num2);  
7         int temp=num1;  
8         num1=num2;  
9         num2=temp;  
10        System.out.println("First number after swap "+num1);  
11        System.out.println("Second number after swap "+num2);  
12    }  
13 }
```
- Run Tab:** Shows the output of running the `swapNumber` class:

```
C:\Users\hp\.jdks\openjdk-20.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2023.2.1\lib\idea_rt.jar=53488:C:\Program  
First number before swap 2  
Second number before swap 3  
First number after swap 3  
Second number after swap 2  
Process finished with exit code 0
```
- System Tray:** Shows icons for various applications like Google Chrome, Microsoft Word, and others.
- Bottom Status:** Shows system information: 11:00, CRLF, UTF-8, 4 spaces, 34°C, 5:23 PM, ENG, 9/13/2023.