Q. A

CODE:

```
class DefData{

	static int a;

	static float b;

	static char c;

	static double d;


	public static void main(String []args){

		System.out.println("Default value of int is "+ a);

		System.out.println("Default value of float is "+ b);

		System.out.println("Default value of char is "+ c);

		System.out.println("Default value of double is "+ d);

	}

}
```

```
F:\Assignments\Java\Asst3>java DefData
Default value of int is 0
Default value of float is 0.0
Default value of char is
Default value of double is 0.0

F:\Assignments\Java\Asst3>
```

Q. B

CODE:

```
import java.util.*;

class Gradesheet{

	public static void main(String[] args){

	Scanner sc = new Scanner(System.in);
	System.out.println("Enter marks of PCM");
	int phy = sc.nextInt();
	int chem = sc.nextInt();
	int math = sc.nextInt();
	float total = 0,percentage=0;
	total = phy + chem + math;
	percentage = (total/300)*100;
	System.out.println("Percentage obtained : " + percentage);

	if(percentage>=90)
	System.out.println("Grade A");
	else if(percentage>=80)
	System.out.println("Grade B");
	else if(percentage>=70)
	System.out.println("Grade C");
	else if(percentage>=60)
	System.out.println("Grade D");
	else
	System.out.println("Grade Fail");
}
```

}

```
F:\Assignments\Java\Asst3>javac Gradesheet.java

F:\Assignments\Java\Asst3>java Gradesheet
Enter marks of PCM
90
95
98
Percentage obtained : 94.333336
Grade A

F:\Assignments\Java\Asst3>
```

Q. C

CODE:

```
import java.util.*;

class MathOp {

	public static void main(String[] args) {

		Scanner sc = new Scanner(System.in);
		int a, b;
		double ans = 0;

		while (true) {
			System.out.println("1. Add");
			System.out.println("2. Subtract");
			System.out.println("3. Multiply");
			System.out.println("4. Divide");
			System.out.println("5. Square");
			System.out.println("6. Squareroot");
			System.out.println("7. Exit");

			System.out.println("Enter your choice: ");
			int x = sc.nextInt();

			switch (x) {
				case 1:
					System.out.println("Enter two integers");
					a = sc.nextInt();
					b = sc.nextInt();
					ans = a + b;
```

```
            System.out.println("Addition: " + ans);
            break;
        case 2:
            System.out.println("Enter two integers");
            a = sc.nextInt();
            b = sc.nextInt();
            ans = a - b;
            System.out.println("Substraction: " + ans);
            break;
        case 3:
            System.out.println("Enter two integers");
            a = sc.nextInt();
            b = sc.nextInt();
            ans = a * b;
            System.out.println("Multiplication: " + ans);
            break;
        case 4:
            System.out.println("Enter two integers");
            a = sc.nextInt();
            b = sc.nextInt();
            ans = a / b;
            System.out.println("Division: " + ans);
            break;
        case 5:
            System.out.println("Enter integer");
            a = sc.nextInt();
            ans = a * a;
            System.out.println("Square: " + ans);
            break;
        case 6:
            System.out.println("Enter integer");
```

```
                    a = sc.nextInt();
                    ans = Math.sqrt(a);
                    System.out.println("Squareroot: " + ans);
                    break;
                case 7:
                    System.exit(0);
                    System.out.println("Exiting...");
                    break;
            }

        }
    }
}
```

```
F:\Assignments\Java\Asst3>javac MathOp.java

F:\Assignments\Java\Asst3>java MathOp
1. Add
2. Subtract
3. Multiply
4. Divide
5. Square
6. Squareroot
7. Exit
Enter your choice:
1
Enter two integers
4 5
Addition: 9.0
1. Add
2. Subtract
3. Multiply
4. Divide
5. Square
6. Squareroot
7. Exit
Enter your choice:
5
Enter integer
5
Square: 25.0
1. Add
2. Subtract
3. Multiply
```

```
4. Divide
5. Square
6. Squareroot
7. Exit
Enter your choice:
5
Enter integer
5
Square: 25.0
1. Add
2. Subtract
3. Multiply
4. Divide
5. Square
6. Squareroot
7. Exit
Enter your choice:
6
Enter integer
25
Squareroot: 5.0
1. Add
2. Subtract
3. Multiply
4. Divide
5. Square
6. Squareroot
7. Exit
Enter your choice:
7

F:\Assignments\Java\Asst3>
```