//Question 1: FizzBuzz

Write a program that prints the numbers from 1 to 100. For multiples of 3, print "Fizz"; for multiples of 5, print "Buzz"; and for numbers that are multiples of both 3 and 5, print "FizzBuzz".

```
public class FizzBuzz{
public static void main(String args[]){
for (int a=1;a<=100;a++){
if(a%3==0){system.out.println("Fizz");}
else if(a%5==0){system.out.println("Buzz");}
else if(a%3==0&&a%5==0){system.out.println("FizzBuzz");}
else{system.out.println(a);}
}
}
```

//Question 2: Fibonacci Sequence

Write a program to generate the Fibonacci sequence up to 100.

```
public class Fibonacci_sequence{
public static void main(String args[]){
int max=100;
int x=0;
int y=1;
system.out.println("FibonacciSequence up to:"+max);
while(x<=100){
int sum=x+y;
x=y;
y=sum;}
```

```
}

}
```

//Question 3: Power of Two

Write a program that takes an integer as input and returns true if the input is a power of two.

Examples:

8=> returns true

6=> returns false

```
public class PowerOfTwo{

int number;

PowerOfTwo(int n){n=number;}

void power(){system.out.println("enter a number:"+n);}

if(n is powerof2){system.out.println("true");}

else{system.out.println("false"};}

public static void main{string args[]}

PowerOfTwo obj=new PowerOfTwo(8);

obj.power();

}

}
```

//Question 4: Capitalize Words

Write a program that accepts a string as input, capitalizes the first letter of each word in the string, and then returns the result string.

Examples:

"hi"=> returns "Hi"

"i love programming"=> returns "I Love Programming"

```
public class CapitaliseWords{
string words;
CapitaliseWords(string a){a=words;}
void capitalise(){
system.out.println(capitalise"hi");
system.out.println(capitalise"i love Programming");}
public static void main{string args[]{
CapitaliseWords obj=new CapitaliseWords();
obj.capitalise();
}
}
```

//Question 5: Reverse Integer

Write a program that takes an integer as input and returns an integer with reversed digit ordering.

Examples:

For input 500, the program should return 5.

For input -56, the program should return -65.

For input -90, the program should return -9.

For input 91, the program should return 19.

```
public class Reverse{
int number;
```

```
Reverse(int x){x=number;}

void reversal(){return (reverse(x))};

system.out.println("enter a number"+x);

public static void main{string args[]{

Reverse obj=new Reverse(x);

obj.reversal();

}

}
```

//Question 6: Count Vowels

Write a program that counts the number of vowels in a sentence.

eg " Hello World " => returns 2

```
  public class CountVowel{

char vowels;

CountVowel(){vowels='a','e','i','o','u';}

void vowelCounter(){count(vowels in a string);}

system.out.println("enter a string:");

public static void main{string args[]{

CountVowel obj=new CountVowel("Hello World");

obj.vowelCounter();

}

}
```