Fundamentals of Programming 1
Exercise sheet 9 – 10%

*** READ THE QUESTIONS CAREFULLY ***
*** NAME YOUR FILES Question1.java etc ***

Question 1
Write a program that uses a loop to print **row 6** of the ASCII table. Your output should look as follows:

```
< = > ? @ A B C D E
```

NOTE: You can refer to the ASCII table below for help.

Question 2
Write a program that **reads in** two Strings **s1**, **s2** and prints them in alphabetical order.

```
Please enter string 1: Zabba
Please enter string 2: Abba
Abba Zabba
```

Question 3
Write a program that uses the following String variables to carry out the following:

1. Create and print out a String called **s4** that is the *concatenation* of s1, s2 and s3
2. Replace all occurrences of the letter **'a'** in **s4** with **'#'**
3. Print out all indices of the letter **'e'** in **s4**

```
String s1 = "Always break ";
String s2 = "the problem ";
String s3 = "down.";
```

```
s4 = Always break the problem down.
s4 after replace = Alw#ys bre#k the problem down.
e at index 9
e at index 15
e at index 22
```

Question 4
Write a program that generates 100 **lowercase** characters and computes the frequency of **vowel** letters 'a', 'e', 'i', 'o', 'u'. Your program output should be similar to the screenshot shown below.

```
n b y o d g b g n i j i m s b a s a y c k u y l c h f v u g h i f m
t x a n c r u t j t h t h c w k b v d a o l o b y d l o z k n c p f
p a k w f v y p b e f w o o y o c g f r n i s v q q y p c z f c h
Frequency of vowels is: 20
```

Deliverables

Place all your files in a folder called **Week9**. Zip the Week9 folder and upload the zip file using the Week9 upload link for your group on MOODLE.

Check the MOODLE upload link for your Group deadline

Plagiarism

This assessment should be an individual piece of work. Any evidence of plagiarism will result in a grade of zero for all parties involved and will trigger the Universities plagiarism policy 3AS08 (see course coordination page).

	0	1	2	3	4	5	6	7	8	9
0										
1										
2										
3				!	"	#	$	%	&	'
4	(	)	*	+	,	-	.	/	0	1
5	2	3	4	5	6	7	8	9	:	;
6	<	=	>	?	@	A	B	C	D	E
7	F	G	H	I	J	K	L	M	N	O
8	P	Q	R	S	T	U	V	W	X	Y
9	Z	[	\	]	^	_	`	a	b	c
10	d	e	f	g	h	i	j	k	l	m
11	n	o	p	q	r	s	t	u	v	w
12	x	y	z	{	|	}	~			