



Character Based Programs



Ascii Codes

- **ASCII** stands for **American Standard Code for Information Interchange**. It is a code for representing 128 English characters as numbers, with each letter assigned a number from 0 to 127. For example, the ASCII code for uppercase M is 77.
- Here is the list of ASCII Codes used in the programming:-

Character	ASCII
a	97
b	98
c	99
d	100
e	101
f	102
g	103
h	104
i	105
j	106
k	107
l	108
m	109

Character	ASCII
n	110
o	111
p	112
q	113
r	114
s	115
t	116
u	117
v	118
w	119
x	120
y	121
z	122

Character	ASCII
A	65
B	66
C	67
D	68
E	69
F	70
G	71
H	72
I	73
J	74
K	75
L	76
M	77

Character	ASCII
N	78
O	79
P	80
Q	81
R	82
S	83
T	84
U	85
V	86
W	87
X	88
Y	89
Z	90

Character	ASCII
0	48
1	49
2	50
3	51
4	52
5	53
6	54
7	55
8	56
9	57

Programs of multiple If-Else

- **Character Based Programs:-**

1. WAP to input a gender, if gender is male then print "Hello Sir"; if gender is female then print "Hello Ma'am", otherwise print "Sorry cannot predict".
2. WAP to input a character and check whether it is a consonant or a vowel.
3. WAP to input an alphabet and print it in opposite case.
4. WAP to input an alphabet and print its respective position as in English vocabulary.

Solution of Problem 1

```
import java.util.*;

class gender
{
    public static void main(String args[])
    {
        char gender;

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter Gender");

        gender = sc.next().charAt(0);
```

```
        if(gender=='M'||gender=='m')
        {
            System.out.println("Hello Sir");
        }
        else if(gender=='F'||gender=='f')
        {
            System.out.println("Hello Ma'am");
        }
        else
        {
            System.out.println("Sorry cannot predict");
        }
    }
}
```

Solution of Problem 2

```
import java.util.*;

class vowel_consonant {
    public static void main(String args[]) {
        char ch;

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter Character");
        ch = sc.next().charAt(0);

        if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u'||ch=='A'||ch=='E'||ch=='I'||ch=='O'||ch=='U')
        {
            System.out.println("Vowel");
        }
        else
        {
            System.out.println("Consonant");
        }
    }
}
```

Solution of Problem 3

```
import java.util.*;

class Opp_Case
{
    public static void main(String args[])
    {
        char ch,ch2;
        int ch1;

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter Character");
        ch = sc.next().charAt(0);
```

```
        if(ch>=65&&ch<=90)
        {
            ch1 = (int)ch+32;
            ch2= (char)ch1;
            System.out.println(ch2);
        }
        else if(ch>=97&&ch<=122)
        {
            ch1= (int)ch-32;
            ch2= (char)ch1;
            System.out.println(ch2);
        }
        else
        {
            System.out.println("Invalid Choice");
        }
    }
}
```

Solution of Problem 4

```
import java.util.*;

class position
{
    public static void main(String args[])
    {
        char ch;
        int pos=0;

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter Character");
        ch = sc.next().charAt(0);
```

```
        if(ch>=97&&ch<=122)
        {
            pos= (int)ch-96;
        }
        else if(ch>=65&&ch<=90)
        {
            pos= (int)ch-64;
        }
        else
        {
            System.out.println("Invalid Choice");
        }
        System.out.println("The position in English Vocabulary
is:"+pos);
    }
}
```