

1. Write a C program that accepts a positive integer  $n$  from the terminal and then prints out the numbers between 1 and  $n$  inclusive which are multiple of 5 but not multiple of 3. [6]
2. Write a C program that accepts three integers dd, mm and yy that represent a date of September 2012. Here dd, mm and yy correspond to day, month and year respectively. Then it checks the validity of the date entered. If the date is invalid, then the program stops after printing appropriate message. If the date is valid, then it prints out the date of the following day. [10]

(Typical input: 28 9 2012 Typical output: Date following 28/9/2012 is 30/9/2012)

3. Write a C program that does the following:
  - a. It accepts a sequence of integers from the user, continuing as long as the user enters even integer. Once an odd integer is entered, the program stops accepting input.
  - b. The program then computes the total number of even integers entered, the sum of them and print those out. [7]
4. Write a C function **vchar** that accepts a character as argument and returns 1 if the character is a vowel and zero otherwise. [6]

5. Consider the following C program:

```
#include <stdio.h>
int main()
{
int x[5] ={-4, 9, 12, -3, 7 };
int a, b;
int *p = x+1;
*(p+3)=9;
a = *(x + 3);
b = *(--p);
printf("a=%d b=%d *p=%d x[4]=%d\n",a,b,*p,x[4]);
return 0;
}
```

What is the output of the program? [6]