C assignments – Day 17 (17-Sept-2022)

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Que1

```c
// Write aprogram to check for the prime number.
#include <stdio.h>
void main(){
    int num, i=2, checker=1;
    printf("Enter your number\n");
    scanf("%d",&num);
    while(i<num/2){
        if(num%i == 0){
            checker=0;
            break;
        }
        i++;
    }
    if(checker==1)
    printf("The number entered is prime.");
    else
    printf("The number entered is not prime.");
}
```

Que2

```c
// Write a program to print all the armstrong numbers between two entered
numbers.
// Input must be three digits numbers...
#include <stdio.h>
void main()
{
    int a, a1, b,c, b1, sum;
    printf("Enter two three  digit numbers\n");
    scanf("%d%d", &a, &b);
    if (a > b)
    {
        for (b; b <= a; b++)
        {
            sum=0;
            b1 = b;
```

```
            while (b1 > 0)
            {
                c = b1% 10;
                c *= c * c;
                sum += c;
                b1 /= 10;
            }
            if (sum == b)
                printf("%d\t",sum);
        }
    }
    else
    {
        for (a; a <= b; a++)
        {
            sum=0;
            a1 = a;
            while (a1 > 0)
            {
                c = a1% 10;
                c *= c * c;
                sum += c;
                a1 /= 10;
            }
            if (sum == a)
                printf("%d\t",sum);
        }
    }
}
```

Que3

```
// Write a program to print all the prime numbers between two numbers.
#include <stdio.h>
void main()
{
    int a,a1, b,b1, i, checker;
    printf("Enter two  numbers\n");
    scanf("%d%d", &a, &b);
    if (a > b)
    {
        for (b; b <= a; b++)
        {
```

```
            i = 2;
            checker = 1;
            b1=b;
            while (i < b / 2)
            {
                if (b % i == 0)
                {
                    checker = 0;
                    break;
                }
                i++;
            }
            if (checker == 1)
            printf("%d\t",b);
        }
    }
    else
    {
        for (a; a <= b; a++)
        {
            i = 2;
            checker = 1;
            a1=a;
            while (i < a / 2)
            {
                if (a % i == 0)
                {
                    checker = 0;
                    break;
                }
                i++;
            }
            if (checker == 1)
            printf("%d\t",a);
        }
    }
}
```

Que4

```c
// Write a program to check wheather the second last digit of the number entered
is prfect or not.
#include <stdio.h>
void main()
{
    int a, i = 1, sum = 0;
    printf("Enter your number\n", &a);
    scanf("%d", &a);
    // a=a;
    a%=100;
    a/=10;
    while (i < a-1)
    {
        if (a % i == 0)
        {
            sum += i;
        }
        i++;
    }
    if (sum == a)
        printf("The second last digit of the entered number is a perfect
number.");
    else
        printf("The second last digit of the entered number is not a perfect
number.");
}
```

Que5

```c
// Write a program to print the tables of a the numbers between two entered
numbers.
#include <stdio.h>
void main()
{
    int a, b, multiplier, c;
    printf("Enter two  numbers\n");
    scanf("%d%d", &a, &b);
    if (a > b)
    {
        for (b; b <= a; b++)
```

```
        {
            c = 1;
            multiplier=1;
            while (multiplier <= 10)
            {
                c = b * multiplier;
                printf("%d\t", c);
                multiplier++;
            }
        }
    }
    else
    {
        for (a; a <= b; a++)
        {
            c = 1;
            multiplier=1;
            while (multiplier <= 10)
            {
                c = a * multiplier;
                printf("%d\t", c);
                multiplier++;
            }
        }
    }
}
```