

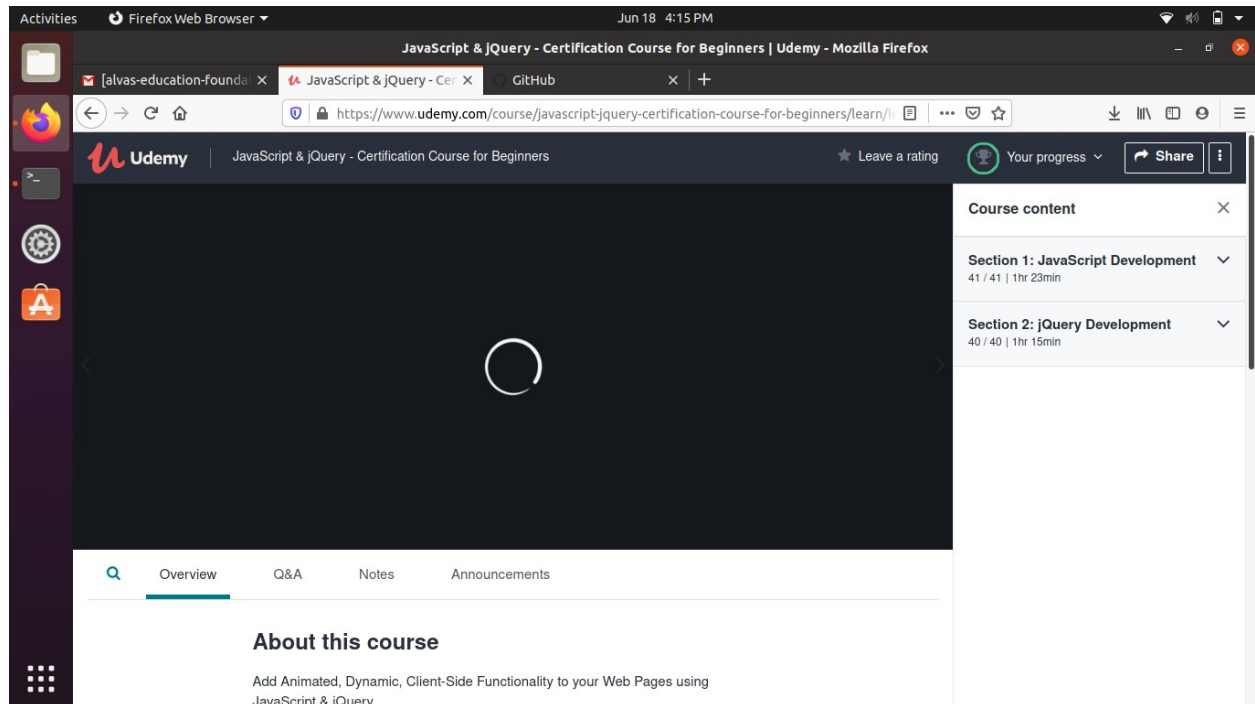
DAILY ONLINE ACTIVITIES SUMMARY

Date:	18/06/2020	Name:	Gautham Prabhu
Sem & Sec	8th Sem	USN:	4AL16CS035
Online Test Summary			
Subject	System Model-ling and Simulation		
Max. Marks	60	Score	- -
Certification Course Summary			
Course	JavaScript & jQuery - Certification Course for Beginners		
Certificate Provider	Udemy	Duration	3 hrs
Coding Challenges			
Problem Statement: 1) Write a C Program to generate first N Magic Numbers.			
Status: Completed			
Uploaded the report in Github		Yes	
If yes Repository name		Daily_report	
Uploaded the report in slack		yes	

Online Test Details:

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Certification Course Details:



Coding Challenges Details:

Program 1:

```
#include<stdio.h>
```

```
int nthMagicNo(int n)
```

```
{
```

```
    int pow = 1, answer = 0;
```

```
    while (n)
```

```
    {
```

```
        pow = pow*5;
```

```
        if (n & 1)
```

```
            answer += pow;
```

```
        n >>= 1;
```

```
    }
```

```
    return answer;
```

```
}
```

```
void main()
```

```
{
```

```
    int n, i;
```

```
    printf("Enter the value of N: ");
```

```
    scanf("%d", &n);
```

```
    for(i = 1; i <= n; i++)
```

```
    {
```

```
        printf("%d ", nthMagicNo(i));
```

```
}
```

```
printf("\n");
```

```
}
```

The screenshot shows a Linux desktop environment. In the foreground, a terminal window is open, displaying the execution of a C program. The program prompts the user to enter the value of N, and for each input, it outputs the first N magic numbers. The inputs shown are 2, 5, and 8, with corresponding outputs: 5 25, 5 25 30 125 130, and 5 25 30 125 130 150 155 625.

In the background, a web browser window is open, showing a search result for 'Write a C Program to generate first N Magic Numbers.' The search result includes a hint and the first few magic numbers: 5, 25, 30(5 + 25).

```
gautham_prabhu@gautham: ~/work/c
gautham_prabhu@gautham:~/work/c$ gcc magic_number.c -o magic_number
gautham_prabhu@gautham:~/work/c$ ./magic_number
Enter the value of N: 2
5 25
gautham_prabhu@gautham:~/work/c$ ./magic_number
Enter the value of N: 5
5 25 30 125 130
gautham_prabhu@gautham:~/work/c$ ./magic_number
Enter the value of N: 8
5 25 30 125 130 150 155 625
gautham_prabhu@gautham:~/work/c$
```

Search results for 'Write a C Program to generate first N Magic Numbers.'

7:36 AM (8 hours ago)

of 5 or sum of unique powers of 5. First few magic numbers are 5, 25, 30(5 + 25).

Hint:

The magic numbers can be represented as 001, 010, 011, 100, 101, 110 etc, where 001 is $0 \text{pow}(5,3) + 0 \text{pow}(5,2) + 1 \text{pow}(5,1)$. So basically, we need to add powers of 5 for each bit set in given integer n.

If $n = 1$; binary representation of 1 = 0001

Magic Number is: $0 * \text{pow}(5,4) + 0 * \text{pow}(5,3) + 0 * \text{pow}(5,2) + 1 * \text{pow}(5,1) = 5$