lab 08

17MIS1079
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1. **Fork**
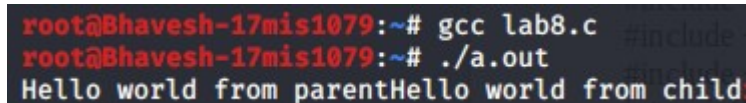
Code:

```
#include<stdio.h>
#include <sys/types.h>
#include <unistd.h>
int main()
{
        int pid;
        pid=fork();
        if(pid==0)
        printf("Hello world from child\n");
        else
        printf("Hello world from parent\n");
}
```

Output:

2. **EXECCVE**

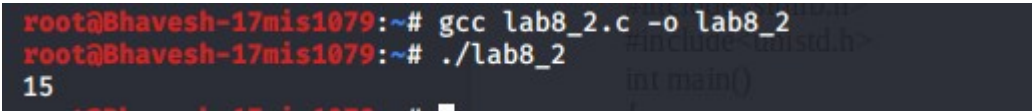**File Name: lab8_1.c**

```
#include<stdio.h>
#include<stdlib.h>
#include<unistd.h>
int main()
{
        int a=fork();
        if(a==0)
        execve("lab8_2",NULL,NULL); //pass ex2.c object here
}
```

File Name: lab8_2.c

```c
#include<stdio.h>
int main()
{
        int i,a;
        int m=0;
        for(i=1;i<=5;i++)
        {
                m=m+i;
        }
        printf("%d\n",m);
}
```

Output:

```
root@Bhavesh-17mis1079:~# gcc lab8_2.c -o lab8_2
root@Bhavesh-17mis1079:~# ./lab8_2
15
```

3. Executing cat command using execve:

CODE:

```c
#include<stdio.h>
#include<stdlib.h>
int main()
{
        char* argv[3] = {"/bin/cat", "lab8_2.c", NULL};
        execve("/bin/cat", argv, NULL);
}
```

Output:

```
root@Bhavesh-17mis1079:~# gcc lab8_3.c -o lab8_3
lab8_3.c: In function 'main':
lab8_3.c:6:2: warning: implicit declaration of function 'execve' [
-Wimplicit-function-declaration]
    6 |     execve("/bin/cat", argv, NULL);
      |     ^~~~~~
root@Bhavesh-17mis1079:~# ./lab8_3
#include<stdio.h>
int main()
{
        int i,a;
        int m=0;
        for(i=1;i<=5;i++)
        {
                m=m+i;
        }
        printf("%d\n",m);
}
```

4.

Code:

```
#include<stdio.h>
#include<stdlib.h>
#include<sys/wait.h>
int main(void)
{
    pid_t pid;
    int status;
    if((pid=fork())<0)
    {
        printf("Error");
    }
    else if(pid==0)
    {
        exit(0);
    }
    if(wait(&status!=pid))
    {
        printf("wait Error\n");
```

```
    }
    //pr_exit(status);
    if((pid=fork())<0)
    {
        printf("Fork Error");
    }
    else if(pid==0)
    {
        abort();
    }
}
```

Output: