

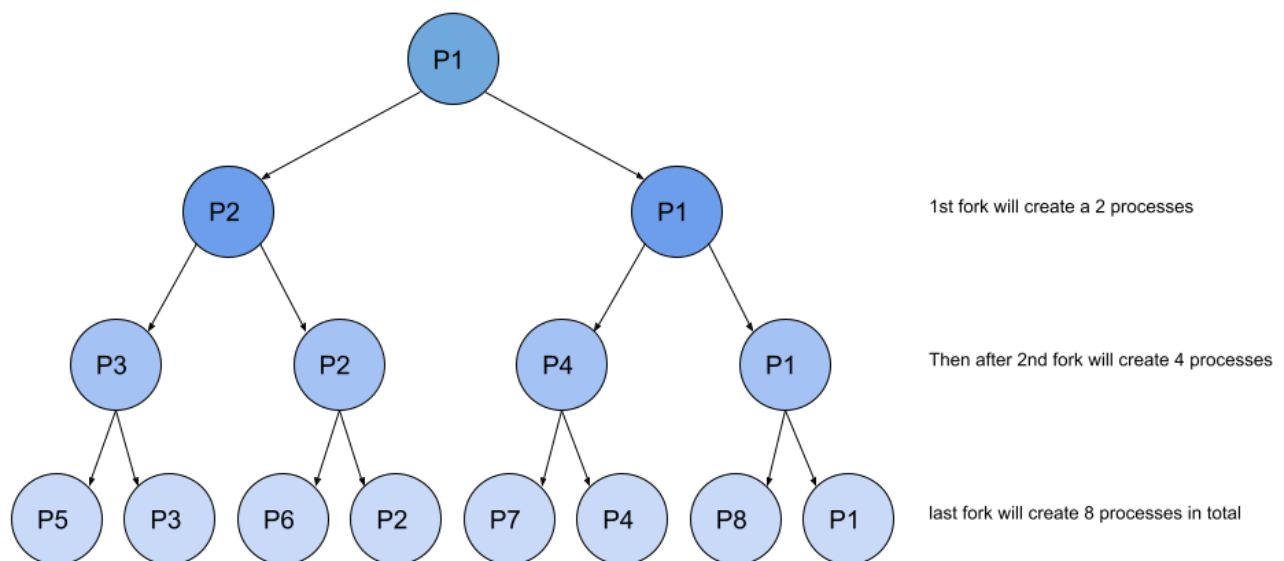
Systems Programming: IT628

Sagar Variya | 202112114 | Quiz5

Q1: Draw a binary to show the number of processes created by the following code. What is the count of the number of processes created?

```
int main(void)
{
    fork() && fork();
    fork();
}
```

Q1 Answer:



Here, let us consider processes are p1,p2,p3,p4,p5,p6,p7,p8

2^n Processes Are created so 2^3 is 8 processes.

And 7 Child Processes are created.

Q2: Consider the following code. What will be the value of variable x displayed from child processes and parent process assuming that child processes terminate successfully?

```
int main(void)
{
    int x = 10, status, childpid;
    int pid1 = fork();

    If (pid1 != 0)
    {
        childpid = wait(&status);
        x = x + WEXITSTATUS(status);
        printf("%d",x);
    }
    else
    {
        int pid2 = fork();
        if (pid2 != 0)
        {
            childpid = wait(&status);
            x = x + WEXITSTATUS(status);
            printf("%d",x);
            exit(x);
        }
        else
        {
            x = x + 5;
            printf("%d",x);
            exit(x);
        }
    }
}
```

Q2 Answer:

15 25 35