

On *fork()*: What are all possible outputs of the following program? Why?

```
#include <stdio.h>

int main(int argc, char *argv[])
{
    int pid ;

    pid = fork() ;    /* fork another process */

    if (pid == 0) { /* child process*/

        printf("A") ;

    } else if (pid > 0 ) { /* parent process */

        printf("B") ;

    }
}
```

On *fork()*: What are all possible outputs of the following program? Why?

```
#include <stdio.h>

int main(int argc, char *argv[])
{
    int pid ;

    pid = fork() ;    /* fork another process */

    if (pid == 0) { /* child process*/

        printf("A") ;

    } else if (pid > 0 ) { /* parent process */

        wait(NULL) ;
        printf("B") ;

    }
}
```

On *fork()*: What are all possible outputs of the program?

```
#include <stdio.h>

int main(int argc, char *argv[])
{
    int pid ;
    int control ;

    control = 10 ;

    pid = fork() ;    /* fork another process */

    if (pid == 0) { /* child process*/

        printf("child=%d\n", control) ;

    } else if (pid > 0 ) { /* parent process */

        printf("parent=%d",control) ;

    }
}
```

On *fork()*: What are the output of the program?

```
#include <stdio.h>

int main(int argc, char *argv[])
{
    int pid ;
    int control ;

    control = 10 ;

    pid = fork() ; /* fork another process */

    control = 20 ;

    if (pid == 0) { /* child process*/

        printf("child=%d", control) ;

    } else if (pid > 0 ) { /* parent process */

        printf("parent=%d",control) ;

    }
}
```

On *fork()*: What are the output of the program?

```
#include <stdio.h>

int main(int argc, char *argv[])
{
    int pid ;
    int control ;

    control = 10 ;

    pid = fork() ;    /* fork another process */

    if (pid == 0) { /* child process*/

        control = 20 ;
        printf("child=%d", control) ;

    } else if (pid > 0 ) { /* parent process */

        printf("parent=%d",control) ;

    }
}
```

On Pthread: What are the output of the program?

```
#include <pthread.h>
#include <stdio.h>
volatile int sum = 0;
void *runner1()
{ sum = 1 ; }
void *runner2()
{ sum = 2 ; }

main(int argc, char *argv[])
{
pthread_t tid1, tid2; /* the thread identifier */
pthread_attr_t attr; /* set of attributes for the thread */

/* get the default attributes */
pthread_attr_init(&attr);

/* create the thread 1 & 2*/
pthread_create(&tid1,&attr,runner1,NULL);
pthread_create(&tid2,&attr,runner2,NULL);

printf("sum = %d\n",sum);
}
```

On *fork()*: What are the output of the program?

```
#include <stdio.h>

int sum = 0 ;
int main(int argc, char *argv[])
{
    int pid ;

    pid = fork() ;    /* fork another process */

    if (pid == 0) { /* child process*/
        sum = 1 ;
    } else if (pid > 0 ) { /* parent process */
        sum = 2 ;
    }

    printf(“%d ”,sum) ;
}
```