Experiment 10:

Write a C program to print the address of a variable and enter a long loop (say using while(1)). Start three to four processes of the same program and observe the printed address values.

Command: nano filename.c

Program:

```
#include<stdio.h>
#include<sys/types.h>
#include<unistd.h>
Int main() {
printf(“Before fork p id :%d\n”,getpid());
int i=0;
while(1){
fork();
if(i==3)
break;
i++;
}
int var;
printf(“Process id =%d\n Address of var =%u\n”,getpid(),&var);
printf(“END\n”);
return 0;
}
```

Terminal: gcc filename.c

./a.out

```c
#include<stdio.h>
#include<sys/types.h>
#include<unistd.h>
int main(){
  printf("Berfore fork p id %d\n",getpid());
  int i=0;
 while(1){
    fork();
     if(i==3)
       break;
     i++;
    }
  int var;
   printf("Process id= %d\n Address of var= %u\n",getpid(),&var);
  printf("END\n");
return 0;
}
```

```
ubuntu@ubuntu2004:~/Desktop/Ex_10$ ./a.out
Berfore fork p id 8340
Process id= 8340
 Address of var= 76967296
END
Process id= 8343
 Address of var= 76967296
END
ubuntu@ubuntu2004:~/Desktop/Ex_10$ Process id= 8341
 Address of var= 76967296
END
Process id= 8347
 Address of var= 76967296
END
Process id= 8345
 Address of var= 76967296
END
Process id= 8342
 Address of var= 76967296
END
Process id= 8346
 Address of var= 76967296
Process id= 8348
END
 Address of var= 76967296
END
Process id= 8349
 Address of var= 76967296
END
Process id= 8344
Process id= 8350
 Address of var= 76967296
END
 Address of var= 76967296
END
Process id= 8351
 Address of var= 76967296
Process id= 8354
 Address of var= 76967296
END
Process id= 8352
 Address of var= 76967296
END
END
Process id= 8355
Process id= 8353
 Address of var= 76967296
END
 Address of var= 76967296
END
```