

Coding guidelines for Assessment

- All the functions should be written in separate .c files and header.h should be maintained separately
- Follow the prototypes given in the question
- Do not invoke any other function within a subroutine apart from validation.
- Every/Any function should return only success - 1 or failure – 0 to the calling function
- Do not use library functions like printf/scanf within function definition
- Avoid declaration/defining many local variables within function definition

Questions

1. Write a function: **bitcopy (int *snum, int *dnum, int n, int spos, int dpos)** that copies n bits (right adjusted) from bit position spos in snum to bit position dpos in dnum
2. Write a function: **int setbits (int *snum, int *dnum, int pos, int n)** that returns snum with the 'n' bits that begin at position pos set to the right most n bits of dnum, leaving the other bits unchanged.
3. Write a function: **int invert (int *snum, int pos, int n)** that returns snum with n bits that begin at position pos inverted, leaving others unchanged.
4. Write a function: **int getbits (int *snum, int pos, int n)** that returns (left adjusted) n-bit field of snum that begins at position pos.