Write a program to show the working of stack using array. void maint ) & fut ch; # Proclude Astationy do 2 prentf ("enter choice: 1. Push 2. Pop 3. Peek 4. display # define N 51 scarf ("%d", &ch); Put stack[N]; fut top =-1; Switch (ch) word push () 2 case 1 : {push(); & Put oc; break; } populate L' Briter dataly); cases: {popl); Scanf (" 7.d", & 20; ff (top == N-1) case 3: Epeekls; Portf ("stack overflows): break; ? case 4 3 displayes; else break; } 3 topto; default: sprintf ("Invalid choice"); } Stack [top]=x; 3 whele Lch! = 0); vold pop() Put Ptem; Output: 9f (top ==-1) enter choice: 1. Posh 2. Pop 3. Peck 4. Bisplay posentf (" stack is empty"); stack B empty enter choke: 1. Push 2. Pop 3. Peek item = Stack[top]; top--; politif (" Y.dh", Ptem); enter data enter charce: 1. Push 2. Pap 3. Peek 4. Display enter data vold display() vold peck() enter choice: 1. Push 2. Pop 3. Peek 4. D& play 8f (top==-1) if (top = = -1) 2 printf ("stack underflow). Proutf ("stack underflowd"); enter data else enter choice: 1. push 2. pop 3. Peek 4. Dr.splay foolfut 1=top , 1>-1; 1--) prhutf ("/dhi, stack[top]); 2 porut ("Id", stack[1]); semared number = 30 enter choice: 1. Posh 2-Pop S. Peek enter choice: I. Rish 2-Pap 3. Rek 4. D. Splay enter choice: 1. Push 2. Pop 3. Feek 4. Display Insuled alunero.